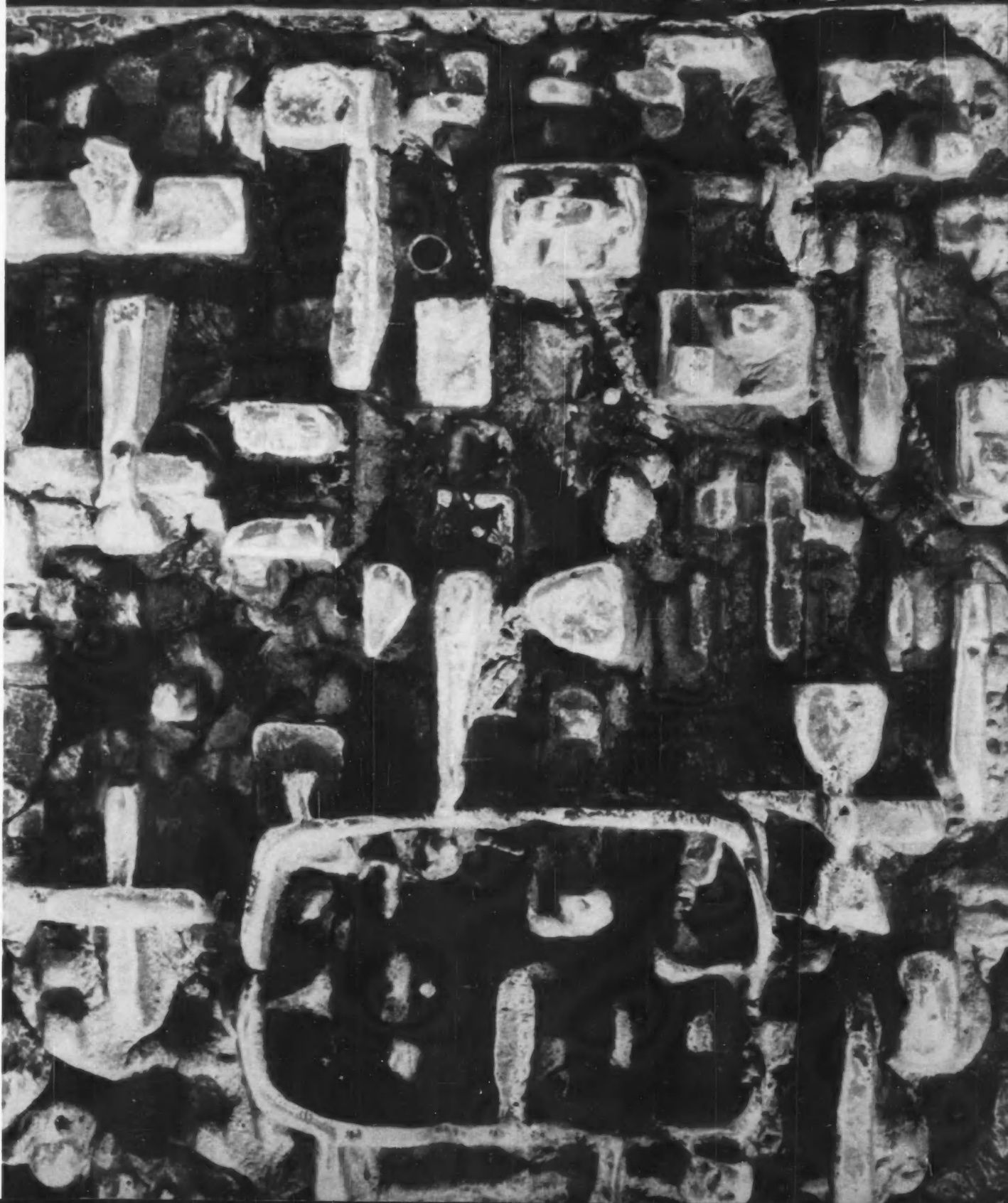


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A *PROGRESS REPORT*—Case Study House

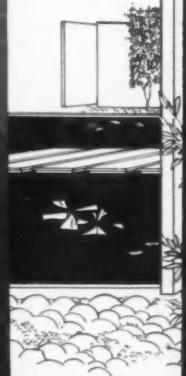
A
DRAMATIC EXAMPLE
OF THE
IMAGINATIVE USE
OF
SAW-TEXTURED REDWOOD

Though work was still in progress when these photographs were taken, it is easy to see why saw-textured redwood was used so extensively throughout this Case Study House. By taking advantage of redwood's rich color tones and interesting grain patterns, the architect has not only designed a house that is highly functional but one that also conveys a delightful feeling of warmth and serenity.

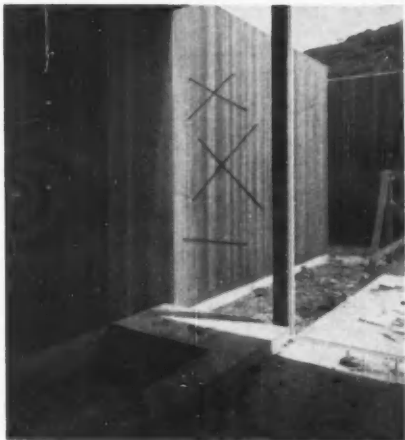
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*All the wonderful warmth of wood
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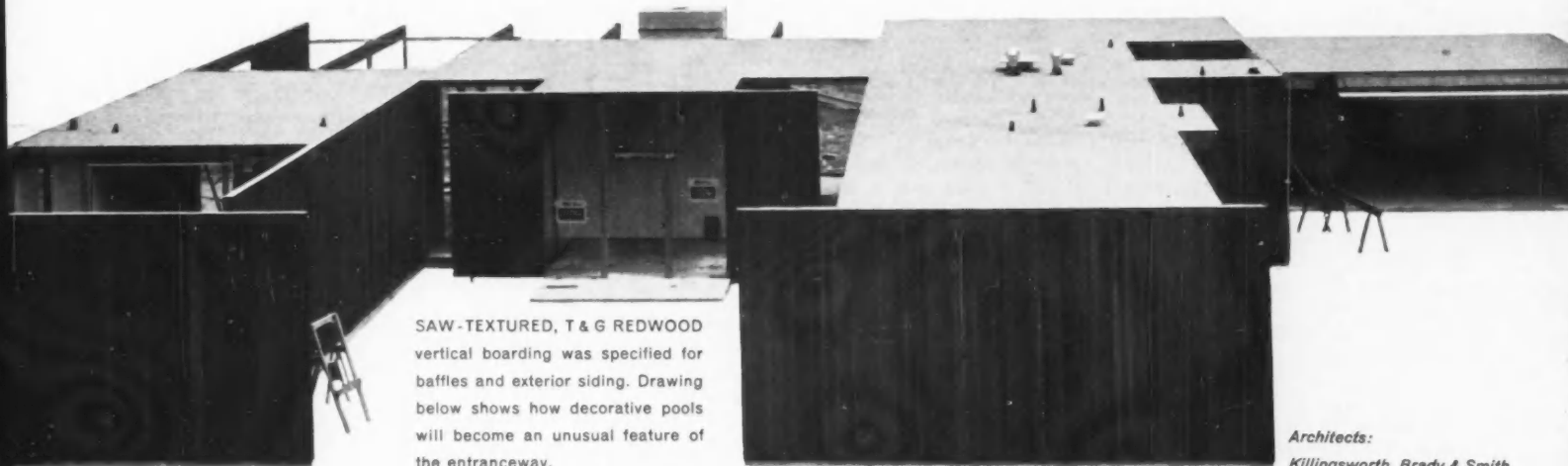
CALIFORNIA REDWOOD ASSOCIATION
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CRA-CERTIFIED KILN DRIED REDWOOD



REDWOOD PANELING in the bathroom (note concrete form for sunken tub) extends into free-standing redwood wall in the adjacent sun-bathing patio.



INTERIOR PANELING was left unfinished so that nothing would detract from the decorative grain patterns and subtle color tones of the saw-textured redwood. Exterior siding was treated with a clear water-repellent.



SAW-TEXTURED, T & G REDWOOD vertical boarding was specified for baffles and exterior siding. Drawing below shows how decorative pools will become an unusual feature of the entranceway.

Architects:
Killingsworth, Brady & Smith



REDWOOD BAFFLES, shielding the house from the street and neighbors, have been made a distinctive design feature. Throughout the house, glass and redwood meet with a minimum of distracting metalwork.

AN INTERESTING DETAIL are the outlets, in several rooms, leading from the master TV antenna system.



MUSIC

PETER YATES

I promised the last article, after writing about a concert of music by Lou Harrison, that I would explain why he orchestrates the sound of such unexpected instruments as a set of coffee cans or a washtub to accompany a violin. In other words, why instrumental means that would have seemed nonsensical to Wagner are now acceptable, whereas Wagner's operatic stories seem nonsensical to us.

Since then I have heard the concert I am discussing and I have heard a series of programs of Oriental music at the University of California, Los Angeles. In retrospect of so much enlarging experience, I feel that I must widen the discussion, employing as usual my oblique approach.

There are two manners of approaching the sound idiom, to make music with it or to make it vivid for what it is as sound. Both are valid methods, but the validity in each depends on the consequence; they can of course be combined or, somewhat differently, mixed.

Some composers wish to have their music both ways. This was the passion of the 19th century composer, to remain within the legalities of form and harmony, yet with these to express, to represent, to give expression to, and therefore to convey as feeling in a medium composed of feeling the thought expressed, the scene or image represented, the emotion exhibited by the situation itself at the moment, however abstract (e.g. "fate knocking at the door"), and the entire composite wrapped up for immediate consumption, like a tamale. We have no reason to believe that Beethoven, who has been burdened by the imposition of this creative ability and glory, went nearly so far as Berlioz in deserving the praises he still receives from connoisseurs of second-hand emotions.

Now all this exploration of new dimensions of expressiveness in sound and noise is reopening the fundamental questions of music, asking again what music is; and that is a very fortunate occurrence, because the answer had seemed all too well settled: that it should be sound harmoniously wrapped up like a tamale, preferably hot. And upon this conception was imposed the distinctly different criterion, that music should be a work of aural architecture, a construction, cool, edible, and dispassionate, like a wedding cake.

The younger European composers continue these two contradictory presumptions. If I seem irreverent, let me not be misunderstood. The conflict of criteria has been perpetually a source of great art. When the conflict is resolved, as in some Asiatic musics, the great art may remain, as an artifact, but the source of art dries up.

The trouble is, that the conflict of these two criteria, passion and construction, has been so thoroughly worked in European music, that to revive it or continue it, in a new medium, imports into the new medium too many solutions, already used up by the medium within which they originated, and some ambitions which the originating medium has shown to be impractical.

Thus there is, in the work of these younger European composers, a desire to continue making "music," as music has been understood within the tradition the composer desires to break away from, and an ambition which runs along the same old rails towards the ideal of the *Gesamtkunstwerk*, that mighty mixture of all media that has lately come down to what Aldous Huxley called, prophetically, the "smellies."

To start over, in a fresh medium of sound, relieved of preconceptions, is to find ourselves in the esthetic-philosophic dilemma of John Cage. For 25 years he has been gnawing away at his dilemma, bringing forth projects, some adequate, some projective. One work in the album of his *25-Year Retrospective Concert* is a Quartet for tom-toms. The rhythmic construction is derived from practices of Asiatic music, without imitating any one such practice. . . . "The hypnotic-muted effect depends on two factors—on playing center and edge (of the drums) with the fingers, less frequently with wire brush and tympani stick, and on the rhythmic length of the structure, the parts of which are expressed sometimes by sound and sometimes by silence."

Of course the means in themselves are not hypnotic; and, unfortunately, the rhythmic lengths and parts do not impose themselves hypnotically on this listener. I think the piece a failure.

But when listening to Cage's *Aria and Fontana Mix* I realized that the Quartet for tom-toms had at last found a medium; here the rules worked. I don't know whether they are the same rules, probably not, but they have the same purpose, forgetting the "hypnotic" business. Here are noises which present themselves in shape as noises, much more interesting to the ear than the wave-like electronic sequences of Maderna. And because the noises emphatically present themselves as individuals, each clothed in its own character, the silences between them become vital and vivid as a street, in a new city, as emotionally present and inexplicable as dream. This was the *Fontana Mix*, and what in the abstract character of noise on tape became vivid—enough to stir up audience response—was doubly vitalized by the live voice, singing, speaking, sighing, barking like a dog. As if on that new street, in that new interesting city, one walked into an incident, a crowd listening to a speaker, a lyrical cascade of voices from a stall. This isn't music, and I don't intend my suggestions to be similes. As vital for the performance as the voice of the performer is the audience response, laughing, sporadic boos, impertinent imitations of the sounds. Cathy Berio has performed the *Aria and Mix* a number of times, and only once, she told me, has she been embarrassed; that was before an afternoon subscription audience in Milan, when no one booed, no one laughed, no one imitated any of the sounds. After that I was ashamed that I had listened in silence.

By contrast, the next work, *Theme (Homage to Joyce)*, came close to being a genuine work of music, because the entire tape had been put together of electronic permutations of the sound of Cathy Berio's voice, reading the onomatopoeic first passage, the theme, of the eleventh chapter of James Joyce's *Ulysses*. Berio sets a high value on the onomatopoeia of the English language and on such a poem as Poe's *The Bells*. The theme of Joyce's chapter, he tells us, is varied by the author in the style of a *fuga per canonem*. Though how a chapter of words can become, except by the most devious intellectual subtleties, a *fuga per canonem*, somehow escapes me. I cannot read it in the text. I am quite aware of the possibilities of verbal counterpoint and myself use it regularly, in verse and prose, but to call such an example a *fuga per canonem* seems to me bravura, or bluff.

During his lecture at San Fernando State College, Luciano Berio played us several progressive compositions on this text, for one, two, and three voices respectively in English, French, and Italian, exhibiting the many possibilities of this method. All were impressive, but for my taste Cathy Berio's reading of Joyce's original text is in every way more beautiful, expressive, and in particular more subtly musical than any of the electronic variants. The composite is, however, a valid means of sound composition, achieved perhaps more successfully by Stockhausen in his *Children's Voices*. Here again I must be cautious, because Berio assures me that his electronic mixture is technically more elaborate than Stockhausen's, and for lack of experience I give him the benefit of my doubt. Such a vocal composition, superimposed upon an electronic composition, supporting the live voices of speakers or actors and live instruments and dramatic sounds, might lead to the great opera of sound Luciano Berio has in mind as the goal of his adventure. I still call it *Gesamtkunstwerk* and old-fashioned.

The final experiment in this sort brought Leonard Stein to the piano to accompany Cathy Berio in a piece called *Voix de Femme* by Sylvano Bussotti, from a larger work entitled *Pieces de Chairs II*. Bussotti is a very young Italian composer who seems to have borrowed from John Cage and from his immediate European precursors in about equal parts. "Bussotti uses a graphic representation which leaves many elements to be completed by the performer. This fragment makes use of the voice in eleven different languages, while the piano must produce percussive effects by a great variety of means." The version heard at the concert was Bussotti's interpretation, transcribed more or less into conventional notation.

Actually little happened that could not have been derived from the early work of Henry Cowell. The piano was struck with one hand and the strings damped with the other. The strings were plucked and beaten. The piano lid was slammed. The singing voice went its multilingual way as if oblivious of the inci-

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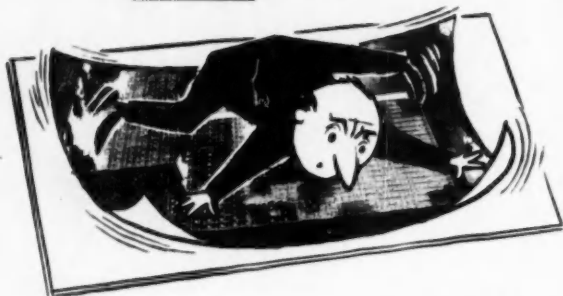
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dental effects behind it, except when the singer putting her head under the piano lid gave forth as in an echo chamber. The whole business could be called unconventional music, or novelty, or what you will. It did not stir the audience as the Cage piece did, and its incidental relationships with music rather detracted from the thought of fun. You couldn't tell whether it should be listened to or responded to.

The remainder of the evening was given over to Gazzelloni performing with Leonard Stein works for flute and piano by Oliver Messiaen and Pierre Boulez, virtuosic and, in comparison with what preceded them, quite empty. Proving to my own satisfaction, if to no one else's, that it takes good music to stand up to an evening of fairly interesting noise.

In spite of my thorough respect for the virtuoso talents of Severino Gazzelloni, my chief enthusiasm went to the wonderful artistry of Cathy Berio, reader, singer, speaker, *fonologia* of vocal noises, each deliberately and meticulously produced in a dynamic exactitude of timing that held the attention constantly to her, performing with a grace that did not ever presume on the opportunities of the media. The next evening we met at KPFFK, where she read for tape the passage by Joyce, three poems by e. e. cummings in several versions, one with voiced punctuation, and part of *Un Coup de Des* by Mallarme. The Cummings poems will be composed by Berio after the manner of the *Homage to Joyce* during his six weeks this summer as composer-in-residence at the Berkshire Festival.

I must compliment the performers for having included in their program work by two American composers, instead of confining themselves like two previous travelers in the same business, Pierre Boulez and Karlheinz Stockhausen, entirely within their provincial European idiom.

A FESTIVAL OF ORIENTAL MUSIC—PART I

Though regional differences of marked character have divided the areas of European music, and national musics have risen and faded during the last century, European musical culture has evolved as a unity rather than a diversity of styles from the Gre-

gorian period to the present. Influences of folk music have given it at various times individual patches of exoticism, and the constant apparent dichotomies between learned and popular art, between conservatism and whatever new music was then current, have imparted a ballistic twist to keep Western music on its evolutionary course. At no point during this long, slow-changing development has any part of the mainstream of European music, in any part of Europe, broken off from the remainder to become an individual, exclusive, esthetic manifestation. During the entire period European folk music has remained regional and in every region subsidiary to the common musical speech of Europe.

In Asia the growth and evolution of music has proceeded in quite the contrary manner. Though stylistic evolution and borrowing have occurred, as when Japan set up its own culture with borrowings from China, Korea, and the distant outposts of India during the Heian period, Asiatic music has been regional and exclusive to a degree that we can scarcely imagine, divided as between one country and another, divided among separate portions of one country, between city and village, between settled and nomadic peoples, split apart even among classes, and by exclusive rights of priesthood and privileges of rank.

I believe one can say truly that from earliest preserved history until the present day there has been no place in Asia where a scholar could study Asiatic musical culture, or the instruments, or the systems of notation, or the inherited or hieratic rites of music, or its numerous manners of embellishment, or indeed anything else about more than a single manifestation of it in one place at one time. The styles have been exclusive, often private, and more often than not unwritten. The instruments have achieved no generalized forms, like the European orchestra or keyboard, to which the musical art of various groups could be adapted. The manners of playing have been generally transmitted by memory or by aural instruction. In many places even the basic melodies have survived only by mnemonics.

I make these distinctions to emphasize the fact that for the first time in the history of Asiatic music there is now a single school where a student of Asiatic musical culture can begin to study in one place more than one part of this whole vast pattern of esthetic differences. Here for the first time it will be possible to discover, document and put into practice not only the particularities but the less-known generalities which govern the musical arts of Asia. And only in this place, at the present time, can an Asiatic musician begin to learn about the other musics of his continent.

The one place is not in Asia; it is in America, at the University of California, Los Angeles. And though the credit goes in part to several individual students, the honor of having organized and established in practicing existence this unprecedented school of Asiatic musical cultures belongs in large part to Mantle Hood.

This year, under the general direction of Mantle Hood, the Department of Music, the Committee on Fine Arts and the Committee on Public Lectures within the University Extension Division, the Library, the Grunwald Graphic Arts Foundation, the Departments of Art, Anthropology and Sociology, Education, English, Folklore, Home Economics, Oriental Languages, Philosophy, Political Science, and Theatre Arts, of the University of California, assisted by the Ford and Rockefeller Foundations, presented the first Festival of Oriental Music and the Related Arts. The programs, focussing upon music but expressing in some degree the interests of each of the departments, began on Sunday, May 8, and continued almost daily until Sunday, May 22, for a total of 22 lectures and performances.

Here I consult the dictionary, to distinguish between Oriental and Asiatic. The continent is Asia. *Asiatic* is "of or pertaining to the people of Asia." *Oriental* is "pertaining to, situated in, or characteristic of the Orient; Eastern; especially Asiatic." Biogeographically, "designating a realm or region including Asia south of the Himalayas, the Philippine Islands, and part of the Indo-Malayan Archipelago." Or, "a person reared in one of the three great civilizations of Asia (the Mohammedan, Indian, and Chinese-Japanese)." Neither word nor its definition covers the subject. Russian music is a part of European music. The arts of the hundred or more linguistic subdivisions of Russia are predominantly Asiatic and should come eventually within the field of Asiatic studies. The music of Persia, to which a lecture and program of the Festival were devoted, has roots in a great cul-

ture of Asia that precedes the long-standing Mohammedan domination, the Persian. Neither word will quite suffice for our purpose. I shall use "Asiatic" to distinguish the entire continental area from the larger group of continents now dominated by European music, and "Oriental" to distinguish the musics covered by this Festival. In the same way I shall use "European" to describe the culture and "the West" to distinguish the area of European musical domination.

Until the present century the West has had only a very sketchy notion of Asiatic history and culture. The chute of history down which every Western scholar slid began in Greece of the Fifth century B.C., threw a quick backward literary loop around Homer, Hesiod, Herodotus, and the Old Testament, avoiding any real historical clarification, came down with diminishing acceleration through the Roman centuries, no more than grazing the Byzantine, took a leap across the Goths and Vandals as well as the so-called Dark Ages, to land with a bump in early medieval history, with which the real facts of the modern world began. The last half-century of revolutionary anti-imperialism, world wars, unprecedented commerce and travel, of struggle for the minds of the uncommitted peoples, and labor within our own historical-literary jungle to hack out a landing-strip for our high-flying exploration of the whole world, has been supplemented by unprecedented, in fact unanticipated discoveries in anthropology and archeology.

We know now that Herodotus told more truth than myth; that the Mediterranean cultures preceding that of Greece are not less than the Greek in their contributions to the present history of mankind; that travelers a thousand years before the time of Christ got around over the oceans more easily and traveled more regularly than travelers during the thousand years after the birth of Christ. We are aware that the birth of Christ concludes a thousand year period of the rise of other surviving religions and religio-philosophies, and that this great historical node, this world-wide appearance of a new spiritual consciousness in mankind has its origins in peoples so dim, though not so much unlike ourselves as we had at first believed, that we are unable to find a time when certain fundamental graphic symbols of our present-day religions did not exist, or any missing link between the human and the sub-human.

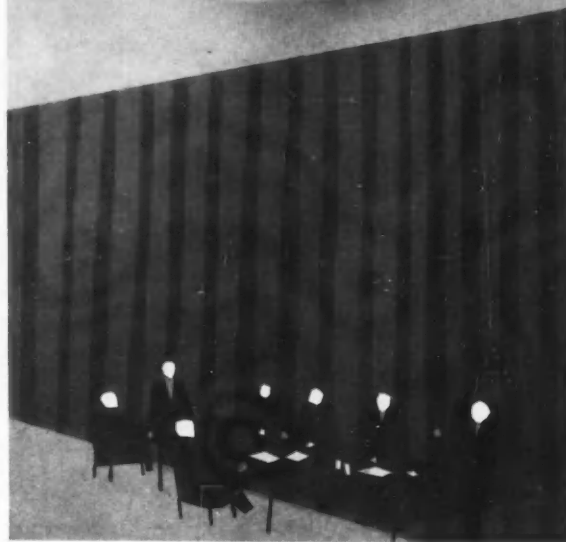
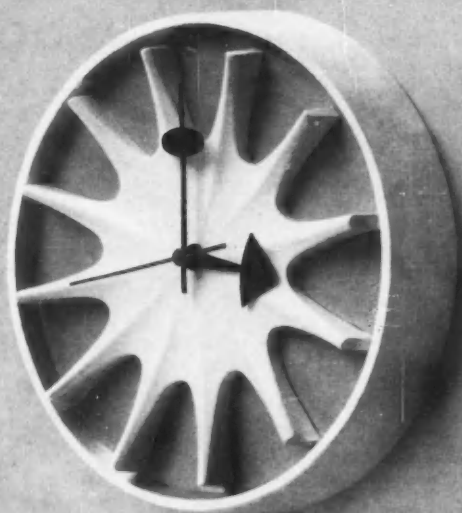
Because we have learned so much, the founding of this Festival of Oriental Music and the Related Arts at the University of California, which might seem no more than a cultural gesture between continents, assumes the grace of a revelation between the world's two principal areas of culture. Here for the first time the mind of Western culture is enabled to penetrate in some degree the musical arts of the Orient and, possibly more significant, here for the first time the mind of Asiatic culture is enabled to become self-conscious on a scale of musical self-knowledge which could eventually equal that of Western culture.

This last sentence may sound presumptuous. Of the depth and radiance of individual Asiatic cultures I have no doubt, but since the period of the wandering scholars of Asia, a thousand and more years ago, Asiatic culture has very nearly ceased to communicate this depth and radiance beyond the local regions inhabited by its multifarious sections.

The Festival program filled six pages in the handsome booklet of some 75 pages that was published with it. The booklet contains 10 articles, on Balinese and Javanese, Japanese, Indian and especially South Indian, and Persian musics, on Japanese costumes, and Bertolt Brecht's Chinese play *The Good Woman of Setzuan*. The lectures of the Festival covered folk-tale, art, films, textiles, costume, poetry, anthropology, cultural exchange, theatre. The musical programs included Japanese Court Music (*Gagaku*), Persian music, Javanese and Balinese music (*Gamelan*), Indian music, and Chinese music, with some dancing. The performers included one trained musician apiece from Persia, India, China, and Indonesia; three of these musicians assisted in programs of music other than their own. Several of the Western performers had been trained during recent years in Oriental music, on American traveling fellowships for study, among them Mantle Hood in Indonesian music, Robert Brown in South Indian music, and William Malm in the literature of Japanese *Naga-uta*. An important member of the group, Robert Garfias, is now studying in Japan. Among the incidental performers, most of them students at the University, plus a few faculty members,

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were visiting students from Persia, India, Holland, and Greece. The leading performers, without exception, took part in more than one type of music and got around acceptably on several instruments. Only one performer, the visiting Chinese virtuoso of the *pipa* and *chin*, Lui Tsun-Yuen, was not a member of the University, and it is hoped that he may become so. All the group performances, except the Persian, were directed by Westerners. The quality of these performances was less remarkable, in the circumstances, than the fact that they occurred.

I was able to attend four concerts: the Chinese recital, the *Gagaku* and the two *Gamelan* concerts. I should like to have been present at the Persian and Indian programs and at several of the lectures. Twenty-two events in fourteen days, even when a couple of the programs are repeated, seems to me asking too much of players and audience. I believe that a series of events of this importance should not be fired off like a string of crackers, even though doing so may draw greater attention and perhaps larger audiences. We show in our society a precarious disregard for the seriousness of matters we deem serious, an insensitive vulgarity in reducing all meanings to whatever can be grasped at one sitting by a relatively unprepared audience. Attention to an unwonted habit of art needs to be followed by rest and consideration, if the effect is to be more than a good show. Asiatic cultures have learned to make much, each in its own area, of a relatively little variety. We compress several distinct examples of a culture into one performance and a half-dozen distinct cultures into a two-week Festival. The Western restless ambition to be noticed causes us to detonate several large experiences, that should be received separately, into no more than a single experience and then play up the resulting values in a falsifying picture-magazine display. We might learn instead from the peoples whose long traditions we are examining that there is more to these traditional cultures than our perverse scholarly curiosity can swallow at one gulp.

It had seemed to me that somewhere in the booklet the term "ethnic music" occurred, but at a quick check I cannot find it, and I am glad. A year ago a charming professor from Tokyo

University was here at UCLA teaching "ethnic music." I introduced him to Igor Stravinsky, and scarcely pausing to draw breath he asked Mr. Stravinsky whether he was not interested in "ethnic music." Mr. Stravinsky said he was not and went on to speak of his approaching visit to Japan. The professor afterwards complained to me that Mr. Stravinsky should have been interested, because he has so often drawn on "ethnic music" for his compositions. I replied that this is quite a false appraisal of Stravinsky's music, which has, despite appearances, almost no folk-music derivations.

The word "ethnic," in its Greek and ecclesiastical usages, connotes those who are outside the chosen culture and therefore culturally less. The dictionary gives as the first meaning: "Neither Jewish nor Christian; pagan." And as the second meaning: "Of, pertaining to, or designating races or groups of races discriminated on the basis of common traits, customs, etc." Since music needs to be discriminated quite as sharply within the races as among them, I think we shall do better to avoid the implied suggestion of a greater race studying the curious habits of lesser races. I am happy that the makers of the Festival have avoided this implied misunderstanding.

Mr. Lui Tsun-Yuen, for example, is a virtuoso of the *pipa*, a four-stringed Chinese lute with a history and literature of several hundred years, going back, if I understand Mr. Lui correctly, not so far as the European lute. Anyone who listened to Mr. Lui would appreciate, without explanation, that there is nothing possible to be played on the *pipa* that Mr. Lui cannot play with a rare excellence. The figurations obtained by the finger-movements of his plucking hand are as interesting to watch as listen to. But, as often happens, the virtuosity of his playing very nearly effaces the stylistic distinctions among the several pieces from different periods that he performed. The whole effect of this music resembles that of Elizabethan lute music, although the large European lute of 16 to 22 strings is a far more complex instrument. Possibly for this reason the revival of European lute-playing has not achieved such virtuosic competency, and its styles, though often improperly rendered, are more easily distinguished in performance.

(Continued on page 31)

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Scientific popularization has a number of functions and they are of considerable significance. It continues, corrects and fills the gaps of school education, which inevitably lags behind the march of progress. It stimulates vocations for research and is thus of direct benefit to creative science, which it also serves by keeping the public at large informed of scientific achievements and power; it thus provides science with a hearing and with the support of public opinion. It creates a link between specialists working in different disciplines, since it is popularization which ensures that the physicist knows something of what is happening in biology, and that the biologist has some idea of what is going on in physics. It keeps—or could keep—politicians informed, and nowadays politicians, more than ever, need to keep up with scientific developments.

But however important these various functions, may be, they do not take into account the true and specific aim of popularization which is purely and simply to introduce the greatest number of people to the dignity of knowledge; to ensure that the great mass of the people should receive something of that which is the glory of the human mind and that they should not be kept apart from the great adventure of mankind—to bring man closer to man by trying to reduce the terrible if invisible gulf of ignorance; to struggle against mental starvation and the resulting underdevelopment by providing everyone with a minimum ration of spiritual calories. . . .

In a word, the ideal of the popularization of science—and this is where its moral value lies—is to develop and assist a community of thought. It is the reverse of Renan's aristocratic concept of a small group of "informed" people acting as guardians to an ignorant multitude. It is a work of "decalibanization,"

if one dares to use the word, or, if you prefer, of intellectual "disimpoverishment" and, hence, of liberation.

The more important its mission appears to us, the more exacting we must be with regard to the way in which it is carried out. We must insist first of all upon strict impartiality, unflinching objectiveness and absolute philosophic honesty. There is no question of using the authority of science to indoctrinate minds or force them to conform to a pattern, to implant in them any cramping or constricting dogmas; but, as the philosopher Guyau put it, they must be "converted to undeniable truths," so that, with the raw materials freely provided, every man may build his own small universe.

Today any distinction between the man of science and the man in the street is unacceptable, as is segregation based on inequality of knowledge. Whether we like it or not, the laboratory now opens right on to the street. Science not only affects us at every moment of our daily lives, it hunts and pursues us. Haven't we all been turned into involuntary guinea-pigs, ever since atomic fission, without asking our opinion, began to plant harmful particles in our bones?

This obligation to endure gives us the right to knowledge.

The time is clearly coming when the man in the street will have his say in all the great social, national, international and moral issues which have been raised recently by certain applications of science. And perhaps the scientist himself, weary of bearing on his own a too heavy burden of responsibility, will be happy to find sympathy and support in public understanding.

All men have the right to receive the truth, and the truth has the right to reach all men.

JEAN ROSTAND — UNESCO

SOUTHLAND CENTER

WELTON BECKET AND ASSOCIATES, ARCHITECTS AND ENGINEERS

MARK LEMMON, CONSULTING ARCHITECT

MURRY ERICK ASSOCIATES, STRUCTURAL ENGINEERS

EDWARDS & HJORTH, CONSULTING STRUCTURAL ENGINEERS

ZUMWALT & VINTHER, CONSULTING MECHANICAL ENGINEERS

MASON-JOHNSTON & ASSOCIATES, GEOLOGISTS-ENGINEERS

J. W. BATESON COMPANY, INC., CONTRACTORS

OWNERS: SOUTHLAND LIFE INSURANCE COMPANY

This large project was designed to fulfill two basic requirements: a business need for increased and more efficient office space, and to provide a sound revenue-producing investment. The architects' solution provides a center with a unique integration between the office building and the hotel facilities, with the hotel linked by a bridge to convention facilities in the block structure under the office tower. Foundations for a projected third tower have also been provided.

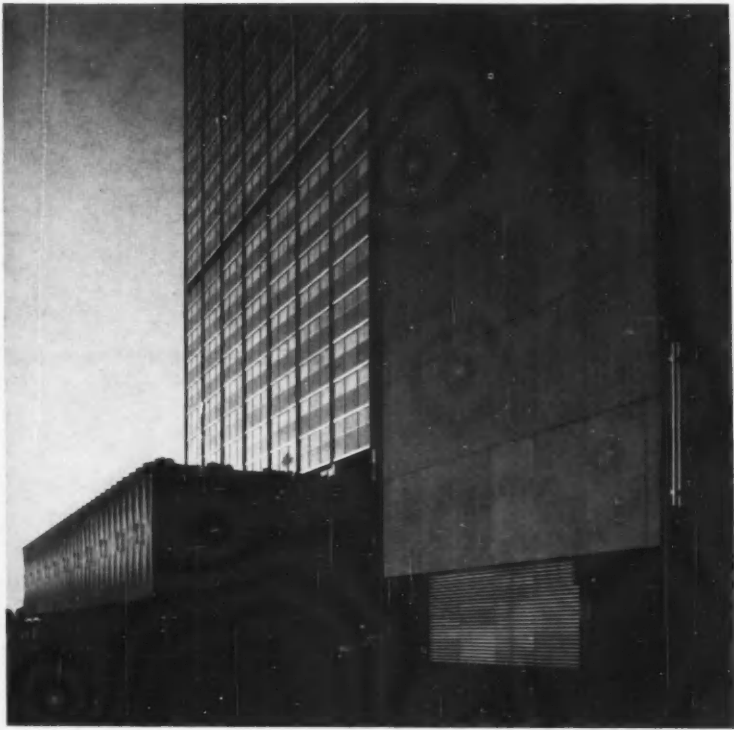
Fundamental principles in the design solution were flexibility and provision for low-maintenance costs, parking, expansion, and an attractive environment. A full city block of $2\frac{1}{2}$ acres in downtown Dallas was selected as the site. A $\frac{3}{4}$ acre terrazzo paved and planted plaza occupies the middle of the block, separating the principal structures. Pools and sculptures in the landscaped areas provide a pleasant respite from the crowded city sidewalks and streets. The ground floors of the office building and hotel are devoted primarily to landscaping and lobbies, supplemented by shopping space. At the ground floor also is located a motor entrance to the parking garage with convenient access to the elevator lobby. The second floor is a common floor for both office building and hotel and provides space for the facilities which may be used by both office personnel and hotel guests. These include meeting rooms and conference rooms and a 2500-seat grand ballroom for conventions, exhibits and lectures.

The typical floor of the office tower is designed with an off-center interior core to provide maximum contiguous space for the owner's own operation and maximum rentability to major tenants. Recessed fluorescent fixtures, arranged in a removable ceiling, provide flexibility for rearrangement of partitions.

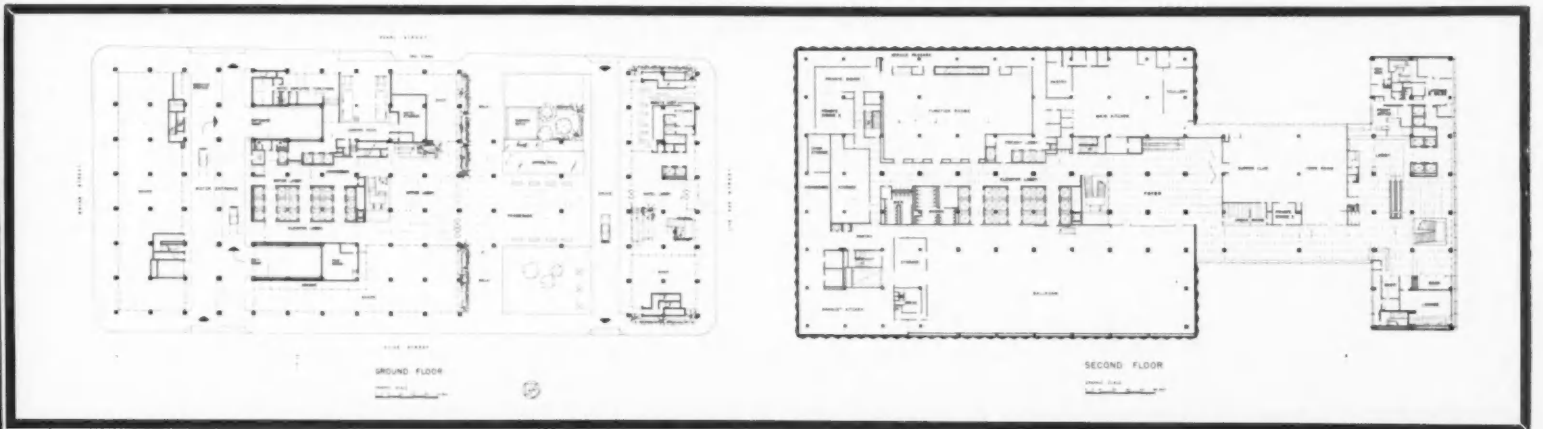
Ramps to the underground parking are reached from an automobile concourse under the office tower, and lead to a three-level parking garage with a capacity of something over 1000 cars. An off-street loading dock will make possible a transfer of goods direct to the floor designation without interfering with street traffic.

The exterior walls are reinforced concrete; the curtain walls, prefabricated panels. Glass mosaic on precast concrete spandrels was selected after extensive tests showed that it was not subject to weathering and is almost entirely self cleaning. The exterior panels are designed with contrasting blue-green tiles in the office tower and blue and gray tiles in the hotel. Windows and exterior mullions in the building are anodized aluminum in contrasting dark gray and natural aluminum.





PHOTOGRAPHS BY ALEXANDRE GEORGES
JOHN ROGERS



SCULPTURAL SCREEN BY BERNARD ROSENTHAL



THE VISUAL ARTS TODAY BY GYORGY KEPES

Vision is above all a cognitive act. The focusing of the welter of optical signals coming from outside to make perceptual images is a basic form of comprehending. We use vision to explore the world, to make ourselves at home in it, and to change it. Even without instruments to aid us, our eyes can establish relations with things as far away as the fixed stars. In our closer environment we depend upon vision to measure and locate things, to identify danger or opportunity.

No less important than the outer vision with which we explore our environment is the inner vision we use to explore ourselves and to find significance and meaning. Our inner world is peopled with sense images—visual, auditory, kinesthetic, tactual—formed from the traces in our systems left by our sensory traffic with the environment. These images inside our heads we use to focus experience, code our sensations, crystallize feelings, build our dreams, and set our goals. Without these images our experience would not cohere and our memories would be disconnected and meaningless.

The created visual image, the visible forms we make with our hands and eyes together, link the outer vision that explores the external world with the inner vision that shapes our felt experience into symbols. These created pictures—graphic images, sculptured forms—are basic to communication, expanding an individual experience into one that is shared. They provide a foundation for the arts and sciences and make social and intellectual growth possible.

The artistic image—the work of visual art—is the created image in its highest form, a significant message delivered simultaneously to our senses, our feelings, and our minds. At every stage of history men have looked for images that would keep them oriented in the world, that would tell them what the world was like, how sweet and rich it was, how good or bad, and what was their own place in it. Artistic images have served to bring their outer and inner worlds into correspondence, providing them with means for inducing inner pictures of the outer environment—pictures shaped with sympathy, with the joys and sorrows, fears and hopes in the heart of man. And above all the work of art has sustained man with visions of a felt order. It has returned understanding to the indispensable eye, the foundation of our thought and feeling, the core of experience.

The common denominator of artistic expression has been the ordering of a vision into a consistent, complete form. The difference between a mere expression, however intense and

revealing, and an artistic image of that expression lies in the structure of the form. This structure is specific. The colors, lines, and shapes corresponding to our sense impressions are organized into a balance, a harmony or rhythm that is in an analogous correspondence with feelings, and these in turn are analogues of thoughts and ideas. An artistic image, therefore, is more than a pleasant tickle of the senses and more than a graph of emotions. It has meaning in depth, and at each level there is a corresponding level of human response to the world. In this way, an artistic form is a symbolic form grasped directly by the senses but reaching beyond them and connecting all the strata of our inner world of sense, feeling, and thought. The intensity of the sensory pattern strengthens the emotional and intellectual pattern; conversely, our intellect illuminates such a sensory pattern, investing it with symbolic power. This essential unity of primary sense experience and intellectual evaluation makes the artistic form unique in human experience and therefore in human culture. Our closest human experience is love, where again sensation, feeling, and idea compose a living unity.

The essential unity of first-hand percept and intellectual concept makes artistic images different from scientific cognition or simple animal response to situations. To repeat, it is the unity of the sensory, emotional, and rational that can make the orderly forms of artistic images unique contributions to human culture. The meaning of the artistic experience is impoverished if any one of these areas of experience takes undue preponderance.

Images deriving solely from a rational assessment of the external world, without passion of the eyes, are only topographical records. Images of emotional responses without real roots in the environment are isolated graphs of a person's inner workings: they do not yield symbolic form. And the most beautiful combinations of color and shape, the most exquisitely measured proportions of line, area, and volume, leave us where they find us if they have not grown out of rational and emotional participation in the total environment. Each of these visions is a fragment only.

The visual images of the twentieth century provide a broad spectrum of fragmented artistic vision.

If I may be allowed to speak in a subjective vein, I now see my own evolution as a painter as a succession of partial insights. As a young painter, I was interested in nothing but an exploration of the sensory variety and riches of the visible world, its wealth of color, texture and light. Soon, however, I had to face my

own feelings and emotions. I took to the expressive reporting of my emotional ups and downs, and made explosive gestures in which the image lost all coherence. In consequence, the need of bringing my feelings and responses into order impressed me, and my conscious goals became discipline and precision. I received immense satisfaction from the very notion of building forms that could live independently because of their inner consistency, their spatial clarity, and balance of color. I felt like a creator—shaping, ordering, making forms that came alive.

My next stand was brought about by environmental change: the world came to exhibit primary attributes of mass poverty, depression, and social unrest. I lost confidence in the validity of creating such forms in isolation from the main stream of events, and in my subsequent phase I interested myself in the impact of man-made images on people, in a visual communication of ideas to make life better. Such a communication had to be on a broad basis, I felt, it had to become mass communication. Painting now seemed an anemic medium, and in my search for idioms with breadth and power I turned toward film as the most advanced, dynamic, and accordingly potent social form of visual communication.

But again, the enormous expansion of human conflict in World War II and its consequences made so many ideas seem shallow that I was impelled, like many others, to search for values rather than tools. The social horizon, with its immense and seemingly insoluble problems, did not seem to contain the key to those values. The scientific revolution, with its menaces, benefactions, and promises, did seem to open an emotional window. Basically, I felt, the world made newly visible by science contained the essential symbols for our reconstruction of physical surroundings and for the restructuring of the world of sense, feeling, and thought within us. I was drawn to the converging contributions made by art and science, and to the distillation of the images common to our expanding inner and outer worlds.

I now recognize that the metamorphoses in my approaches to art are a history of changing assumptions. Whatever concealed motivation attended the road of change, new artistic goals arrived without conscious and systematic decision. These goals arose through my own encounter with concrete realities. Each confining new image became a kind of deduction from a set of postulates of knowledge and value. Like these artistic images, all purposive human acts are based on such sets of postulates. What we see or feel, how we think or act, depends upon the basic assumptions we

hold, sometimes unconsciously. The world is real to us only on the scale of our inner model of space, purpose, and values. To see more than this we have to exchange elementary for advanced assumptions—as we all do, inescapably, in the course of growing up.

Artists, too, see what they see by means of assumptions. Their vision, if it is sensitive and true, becomes ours also: they teach us how to see and how to enjoy. We rely upon them to help us make our perceptual grasp of the world functional, meaningful, satisfying, and communicable—even though there is often a considerable time lag between the artist's grasp and ours, for the artist's high degree of sensitivity tends to make him something of a prophet. We sometimes gain insight into our own attitudes more quickly by questioning art than by questioning ourselves. The attitudes are common—and, in the images of art, highly concentrated. Further insight is furnished by testing the postulates of artists against the conclusions of science, first with respect to the energies and processes of the physical world, second with respect to the energies and processes of the individual and society.

An essential theme of this issue is the contemporary relation between the visual arts on the one hand and science on the other. Because our modern specialization so often separates artist and scientist, neither has been always fully aware of the profundity of the other's work. Scientists and artists both reach beneath surface phenomena to discover basic natural pattern and basic natural process. Yet there is a tendency for the scientist to expect the artist to interpret literally, like some unthinking sensitive device, and for the artist to expect the scientist to think coldly and mechanically, like some unfeeling technical appliance. To a reader with an essentially scientific bent it should be insisted that the creation of a visual image in the arts is not the instinctive act of certain individuals but rather a fusion of their deepest inner workings with the messages of society, including information from the realm of knowledge and rational thought. Like the scientist, the artist uses the learning of his times in a basic way. And, again like the scientist, the artist profoundly affects our world outlook.

A fundamental transformation of our world outlook is indubitably taking place on every possible level of thinking and feeling. Less indubitably, perhaps, but demonstrably, the insight brought us by art is a partner to scientific understanding in this process of transformation. The bold generalizations of scientists, bringing formerly unconnected phenomena into larger, more general schemes

impressive in their cohesion, are redefining the expanding world and keeping it accessible to our intellects. Among the echoes and parallels in other human endeavors are the brave efforts of many artists of this century to find an emotional footing upon this bewildering new world.

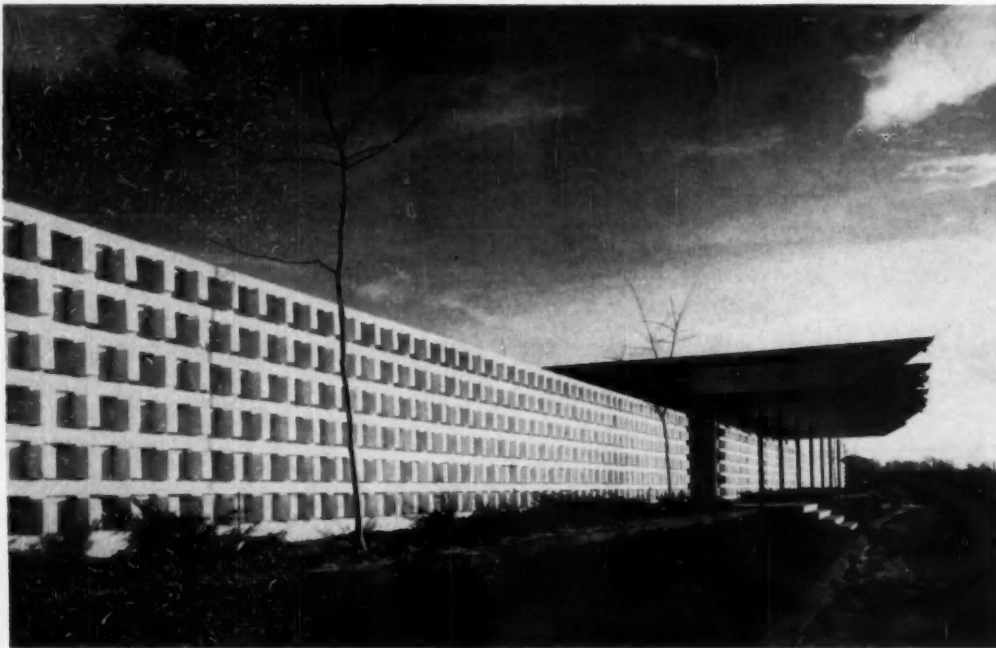
Science, in a sense, has been the angel with a sword, evicting us from the smaller, friendlier world in which we once moved with a confidence born of familiarity, and plunging us into a bigger, alien world where our unaccustomed sensibilities are forced to cope with a formidable new scale of events.

The responsibility is being laid on us of coming to emotional terms with the new horizons, under pain of the blackest self-punishment. Our age, no less than any other, needs to find a consistent orientation, to harmonize its inner and outer vistas. But we are trapped by a crisis of scale.

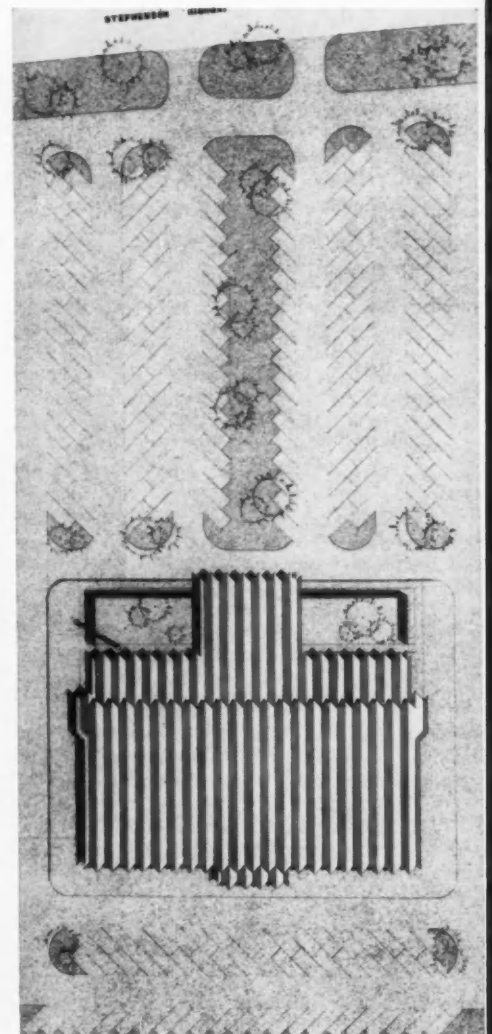
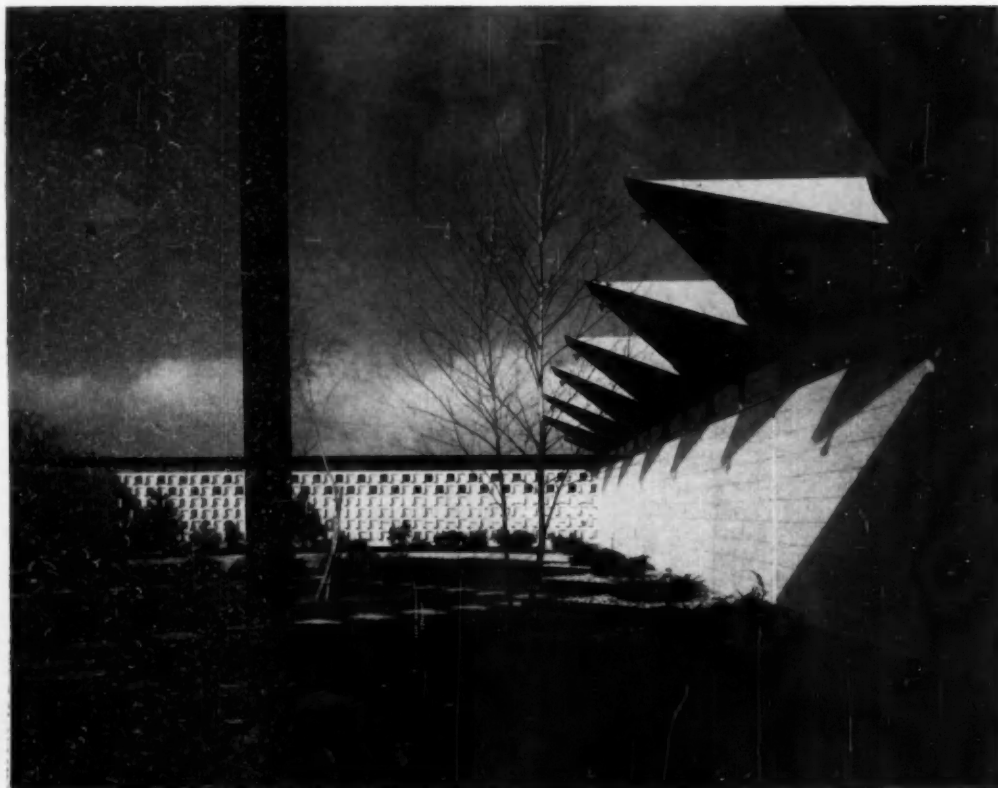
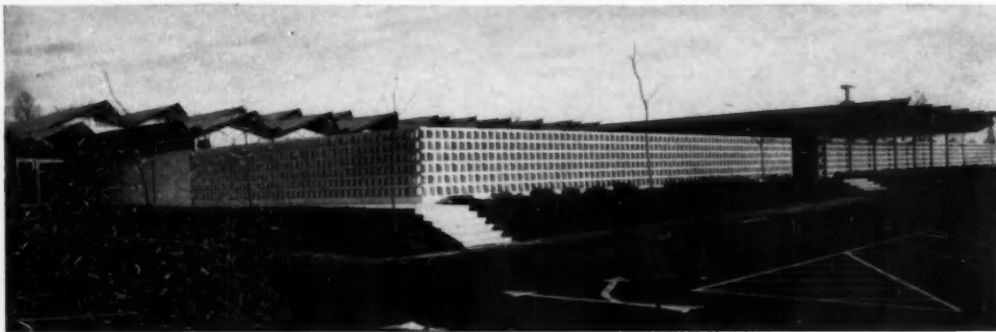
Most of our ideas and images grow out of and belong to a small scale of existence; we try to apply them to a scale that is far too big for them. We seem unable even to keep pace with events. It is as though our human capacities grew by linear increments, and the problems resulting from our activities grew by exponential increments. The limited range of signals to which our naked animal bodies are sensitive has hardly changed in the last twenty-five or thirty thousand years, but our new image of nature now harbors strange forms, such as nuclear particles and radiation, none visible to the naked eye, none relatable to our own bodies. This new nature is alien to our senses—and it is not only nature that is alien. The man-made world, after five centuries of accelerating scientific discovery and technical development, has expanded so explosively in so many directions that we seem unable to grasp its dimensions or assert authority over its dynamics. The wild growth of our cities—in physical mass, in population, in complexity of human relationships—makes them seem endowed with an independent life beyond human control. We have disrupted the atom and speared the moon, but, as we all know, there is as much apprehension over the unknown, unpredictable consequences that are released as there is joy in new vistas of what life can be.

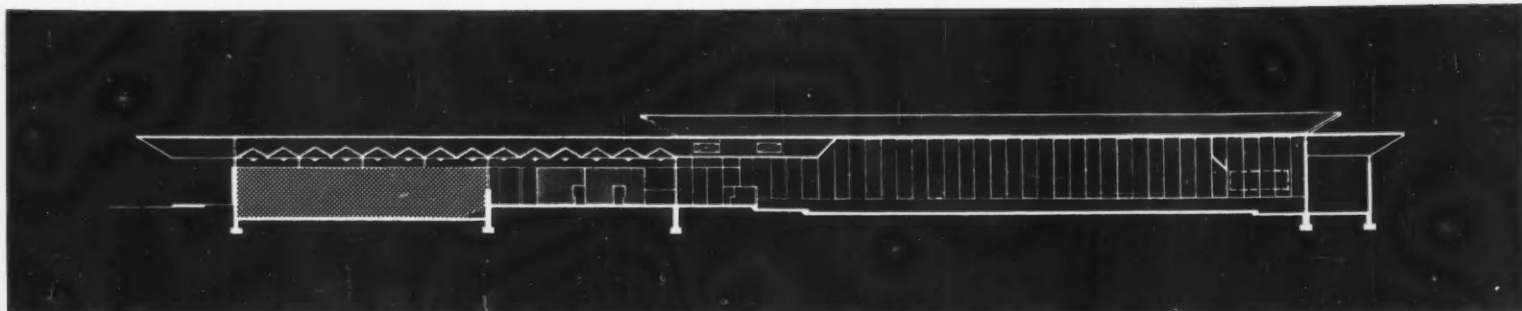
We try to cope with the exploded scale of things without the standards that would help us to evaluate them. For this we need more than a rational grasp of nature. The extended world revealed by science and the technical world of man's own making both require mapping by our senses, the disposition of our activities and movements in conformity with their rhythms, the discovery of their potentialities for a richer, more orderly, more human life. The sensed, the emotional, are of vital

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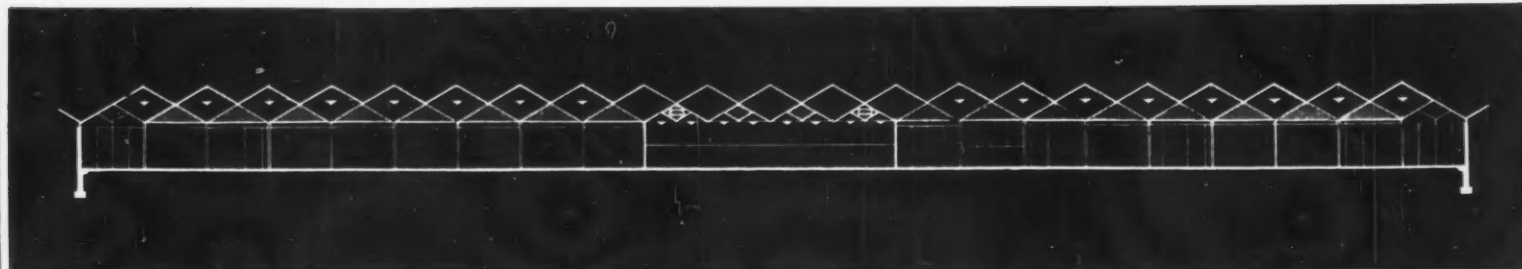


A BOWLING CENTER BY HAWTHORNE AND SCHMIEDEKE, ARCHITECTS





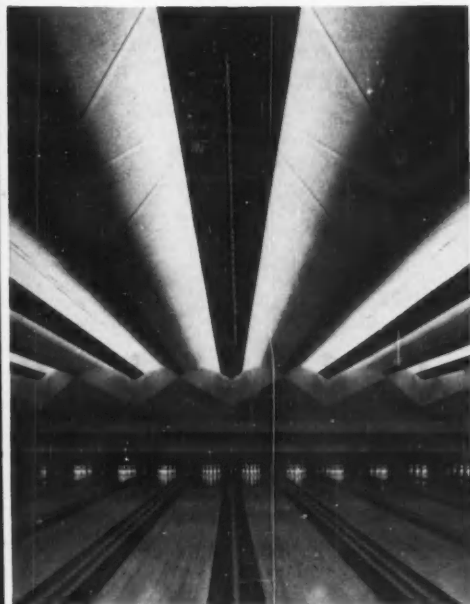
LONGITUDINAL SECTION



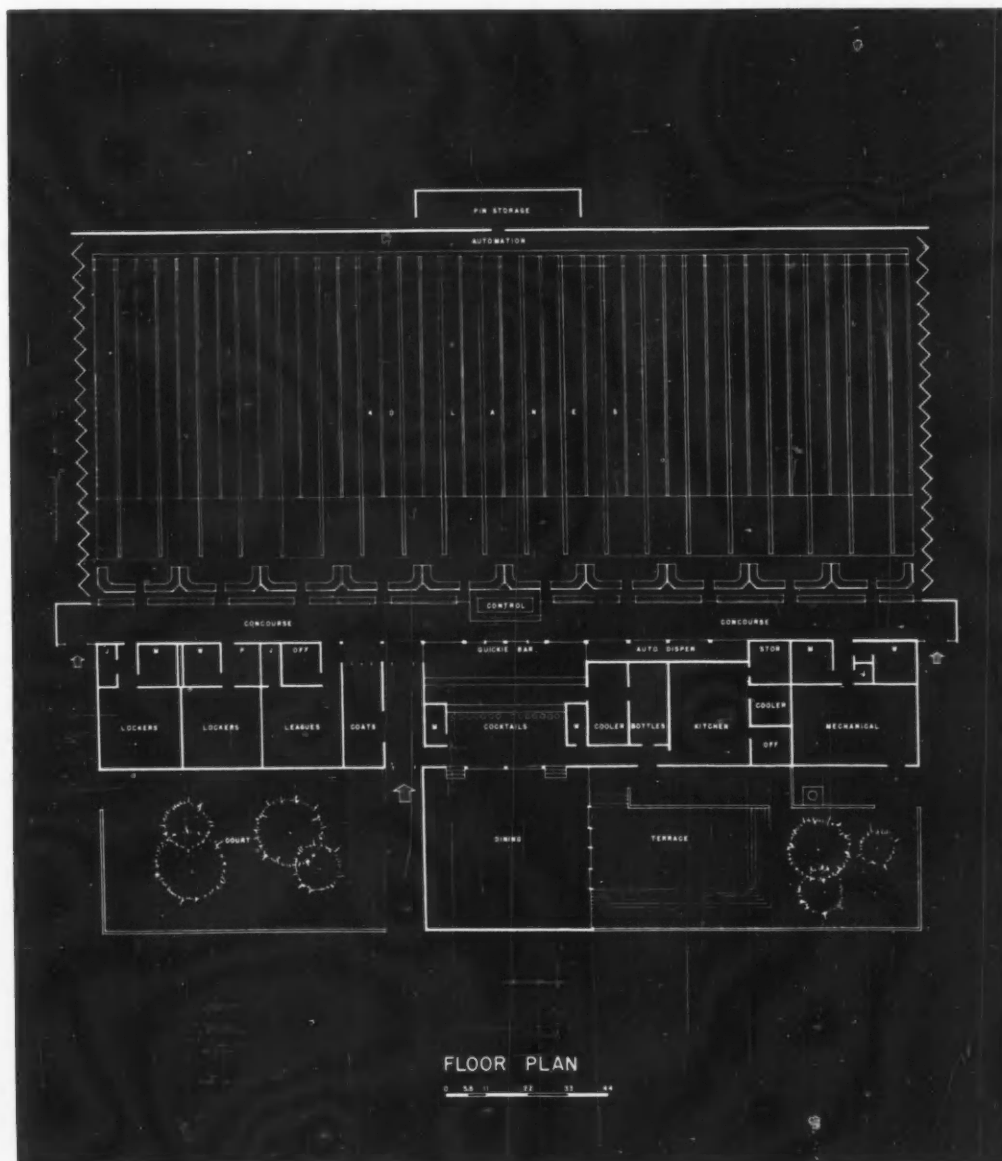
TRANSVERSE SECTION

The project calls for the housing of forty bowling lanes with two locker rooms, storage, a cocktail lounge, dining room, kitchen and parking space to accommodate at least 240 cars.

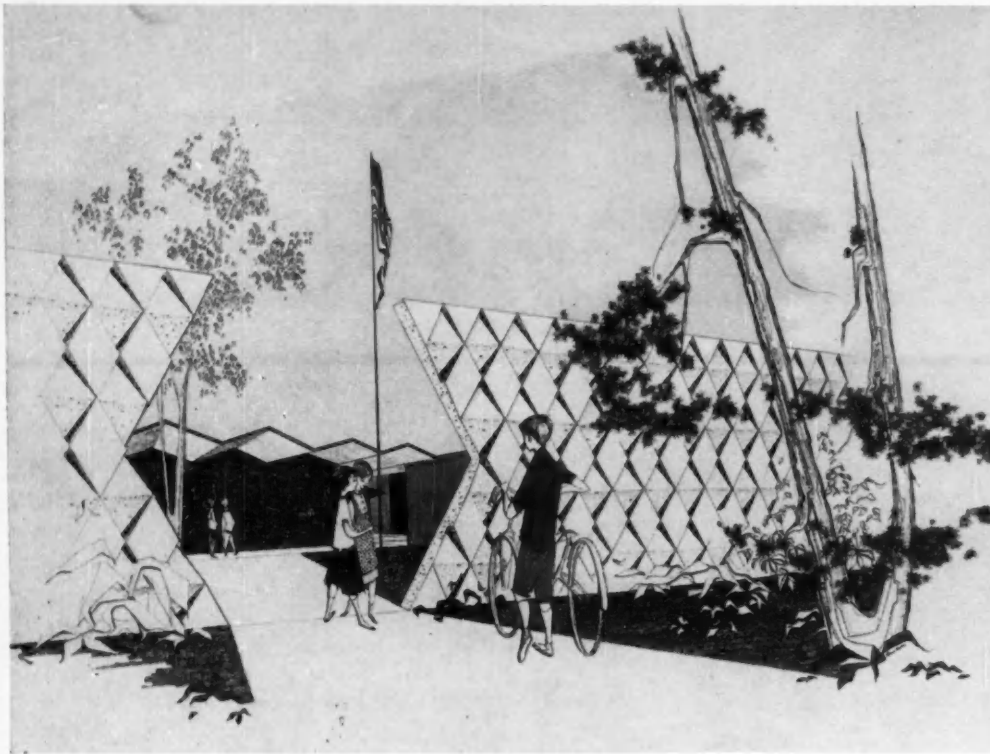
A two-inch thick undulating roof system clear spans 110 feet over automation, alleys, spectators and concourse to rest on the ridges of the same construction over the services spaces. 1" x 7" steel plates form the ridges and valleys of the folds and are laced together with 2" x 2" steel T's. Two-inch thick triangular wood fiber panels infill and laterally brace the lacing webs of the system. Walls and screens are of modular masonry panels that terminate at a height of 6'-8" with wood fiber panel and glass partitions extending to the valleys of the roof system above. The undulating side walls are of thin insulated cement asbestos panels that permit easy future expansion. The building together with landscaped courts and encircling walks is positioned on a raised podium five feet above the parking lot to prevent inundation from spring flash floods and prevent its low silhouette from being hidden behind a field of automobiles from the raised super-highway on the west.



PHOTOGRAPHS BY BALTAZAR KORAB



FLOOR PLAN



ELEMENTARY SCHOOL BY MARIO J. CIAMPI, ARCHITECT

ALLYN MARTIN AND PAUL REITER, ASSOCIATE ARCHITECTS

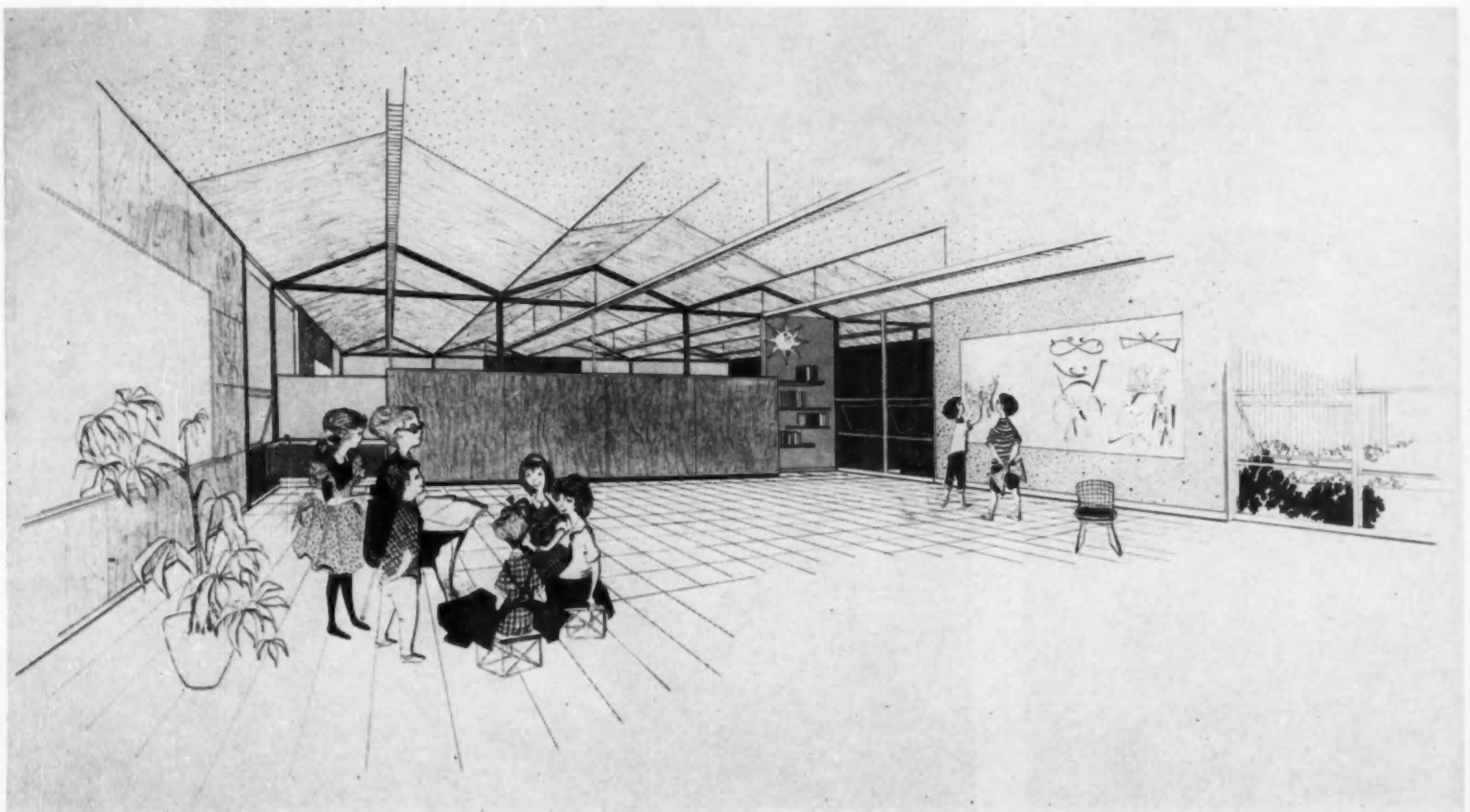
ISADORE THOMPSON, STRUCTURAL ENGINEER

The basic objective of the community of Daly City, California, was to construct an elementary school which could be utilized for educational activities and also be incorporated into the total recreational program since it is an integral part of the city park. The intent was to create small clusters of small classroom units around intimate courts and then to relate the four-room clusters around larger courts. The larger courts are to be utilized for special activities such as entrance courts, lunch terrace and play court, and special gardening and service court. A multi-use unit was placed in a central position so that it would serve as a common meeting area, central to all facilities, and could be used both for indoor and outdoor activities. The arrangement of facilities on this basis was further motivated by a desire to fragment the program into a number of small courts and units, thus creating the impression of a small village. Provisions have been made for protecting the courts of the school building by the introduction of wind and vandalism screens to protect and define the outer spaces.

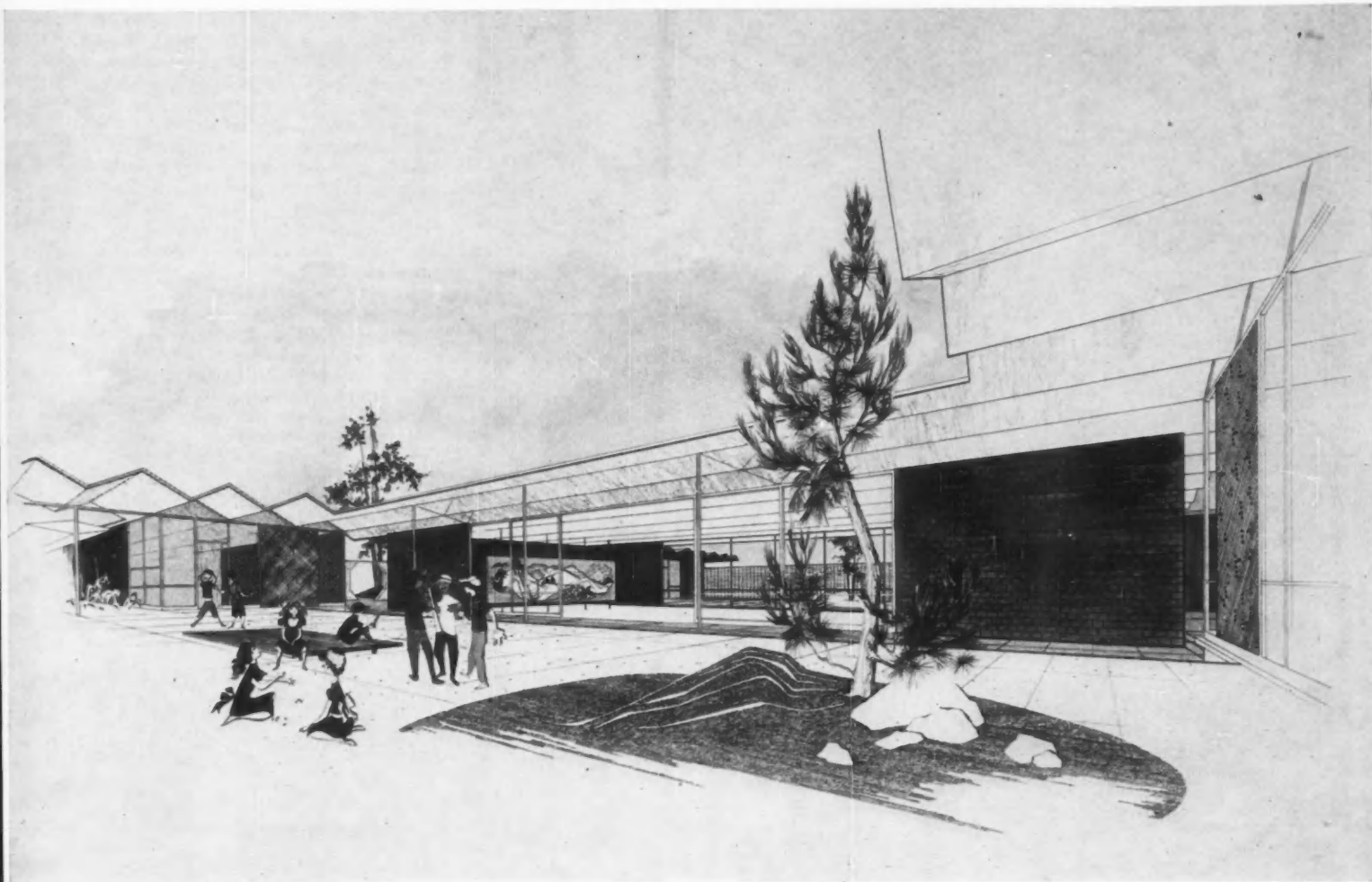
The kindergarten is located at the main entrance with a playground entirely separate from the other play areas.

Since the project is to be constructed in lowlands inclined to be marshy, a special compacted engineered earth fill has been constructed in the form of a raised circular mound. The raised circular mound will be appropriately landscaped and will also be defined with a railing at its edge in order to protect the school building from the adjoining play area. The adjoining park areas have been developed as part of a master plan of Daly City and will include turfed areas, community club house and common parking area, tennis courts, picnic areas and so forth.

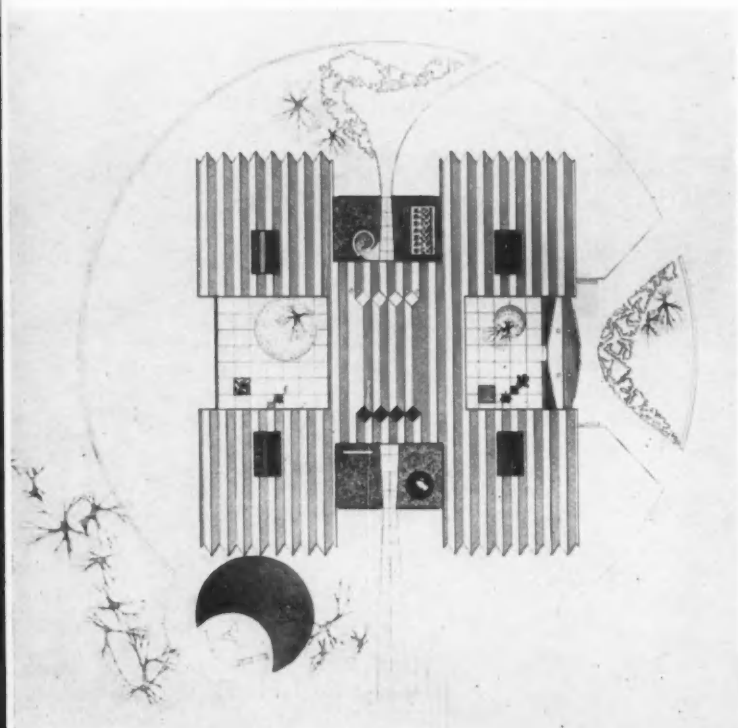
A plywood folded plate roof, supported in large part by the tubular mullions, is the prominent structural feature, and lends itself to the light, open garden pavilion atmosphere.



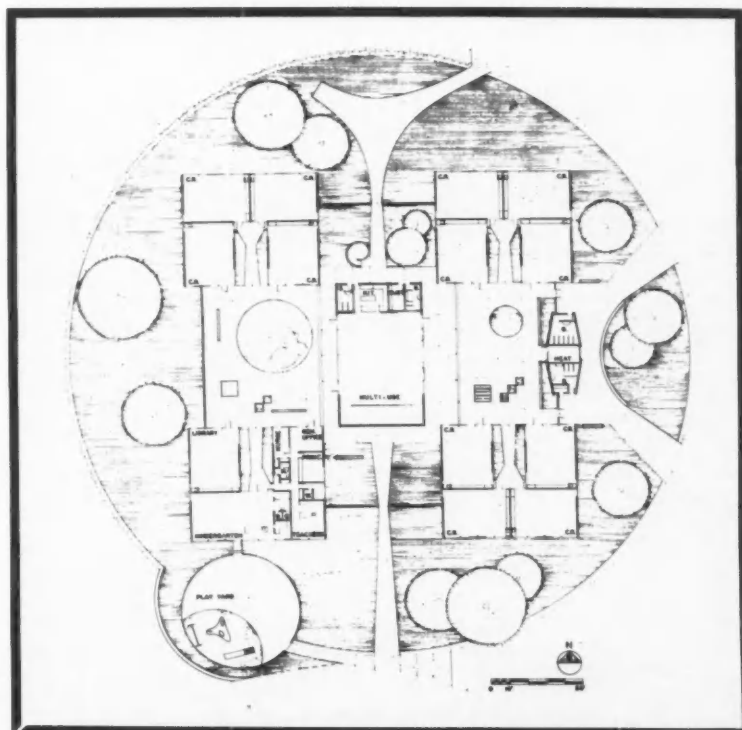
Interior of Classroom

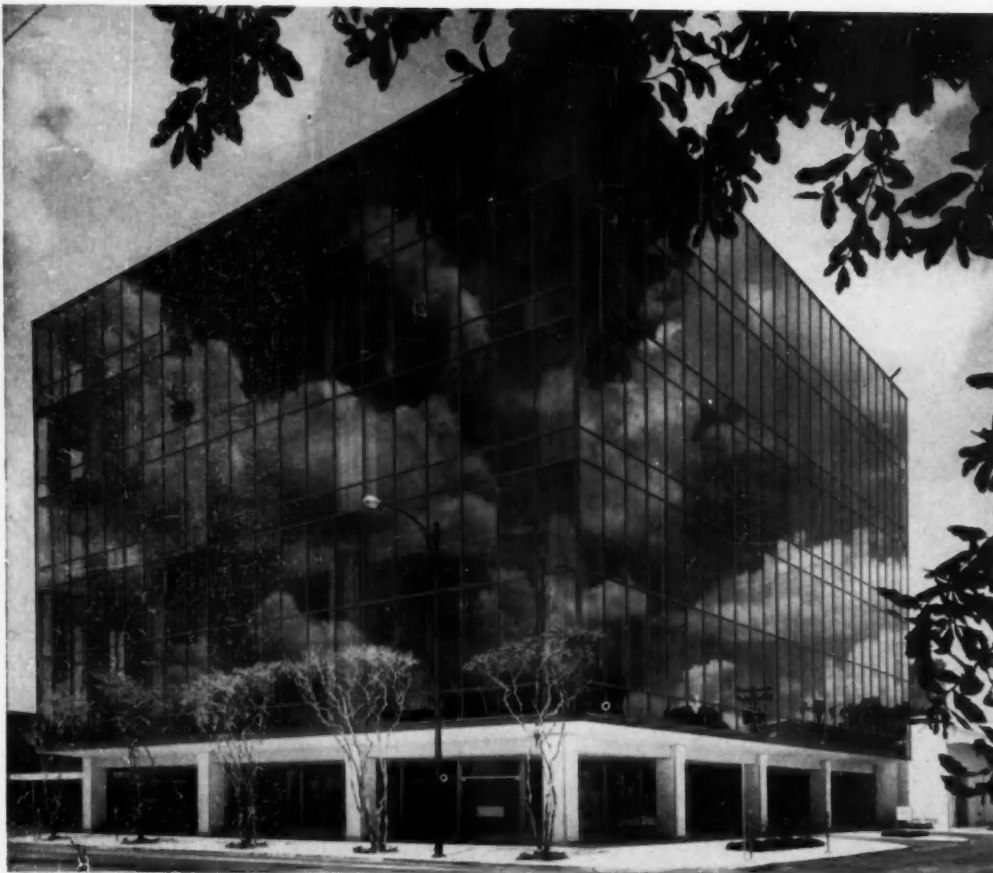


Court Toward Multi-Use Unit



Roof Plan and Courts





The Gibraltar Savings Building, in Houston, Texas, is a simple cubical form enclosed on three sides by uninterrupted glass surfaces extending from the principal floor level to the roof; on the fourth side, by an unbroken wall of decorative aggregate surfaced panels.

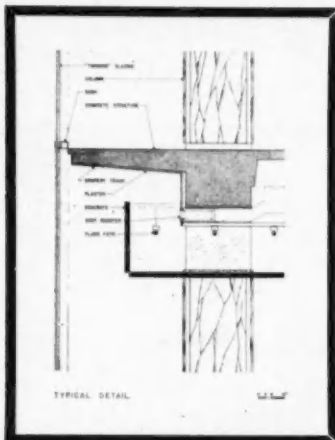
Use of solar gray, heat-absorbing plate glass set in gray anodized aluminum framing gives an impression of mass from without and an openness from within.

The ground floor is devoted to lobby and driveways and sufficient planting to provide the desired setting. Drive-in windows are equipped to handle routine transactions with dispatch. Attendants park customers cars in the basement garage while they transact their business on the upper floors, which are reached by escalators and elevators from the lobby.

Mechanical equipment is largely confined to a penthouse on the roof designed for ultimate incorporation in the five future stories which the structure will accommodate.

Marble, bronze and walnut, overall carpeting, and translucent draperies are used in the public areas.

Luminous ceilings throughout all areas contribute to the spaciousness by day, and divide the building into planes of light at night.

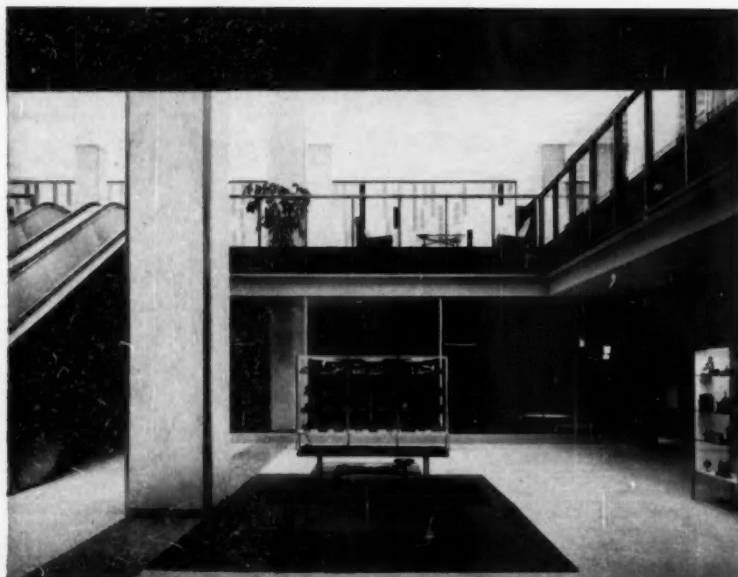
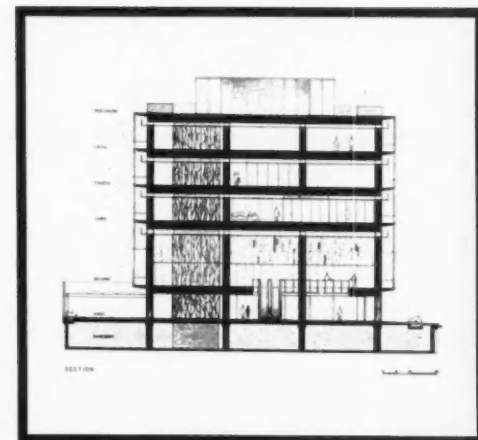


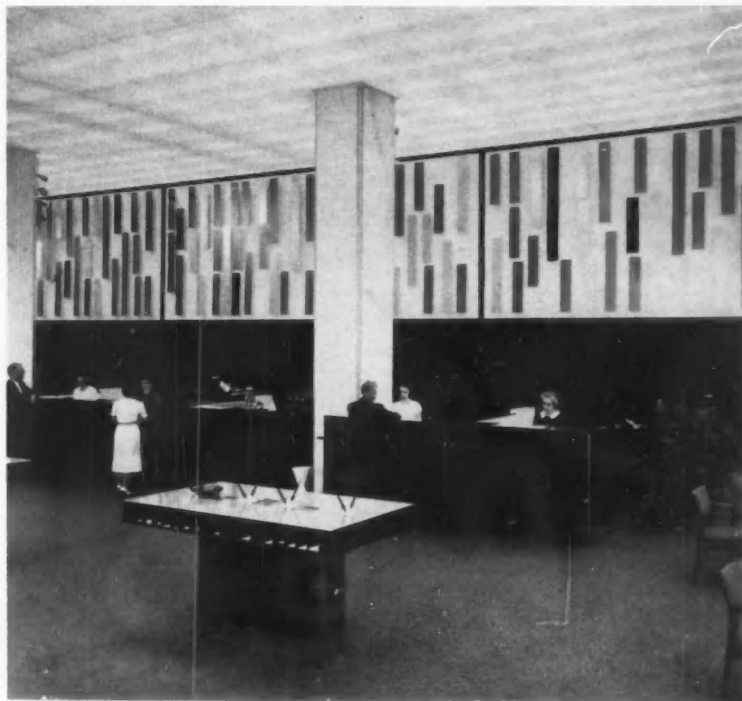
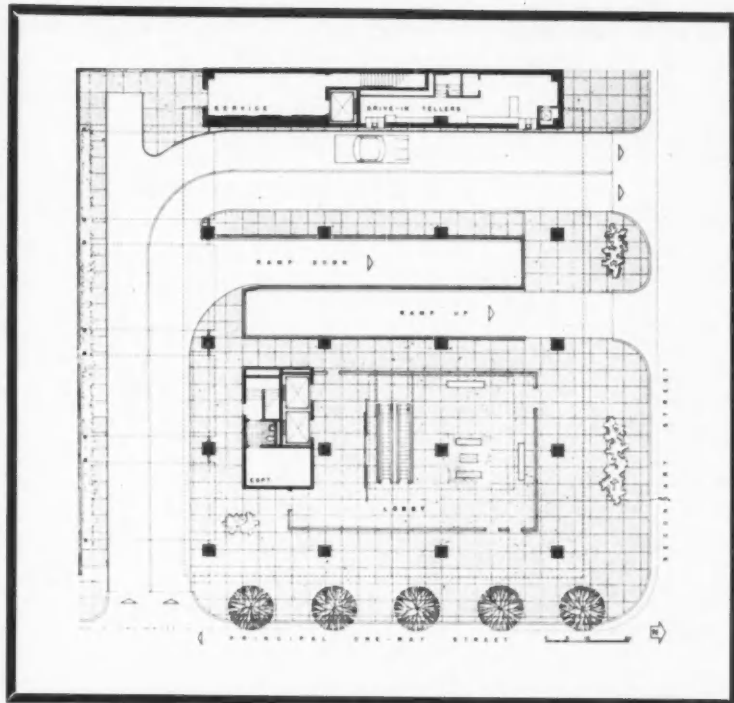
FINANCIAL INSTITUTION

BY GREACEN AND BROGNIEZ, ARCHITECTS

J. VICTOR NEUHAUS III, ASSOCIATE ARCHITECT

KNOLL ASSOCIATES, INTERIOR DESIGNERS







THE LANDSCAPING PLAN

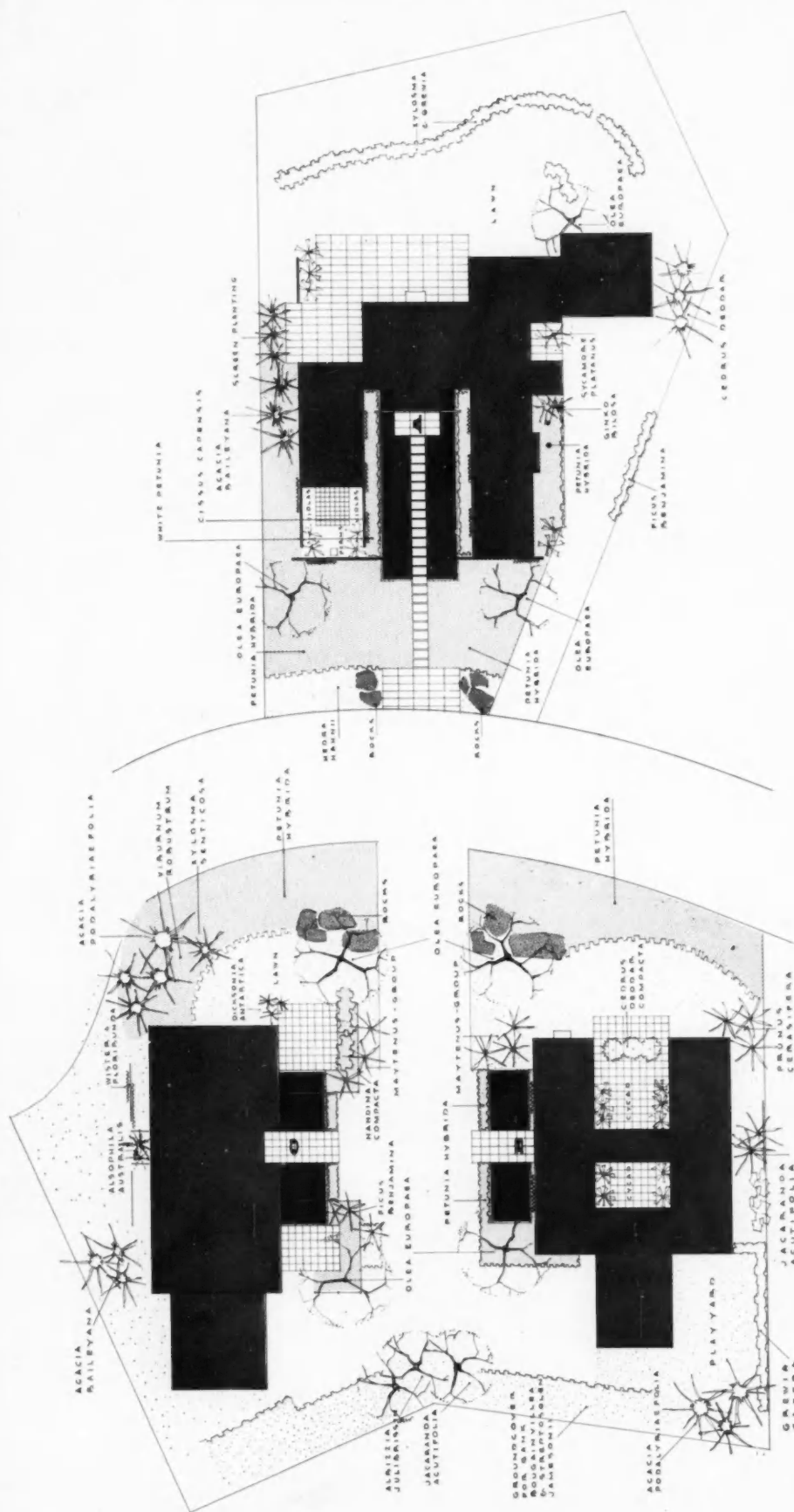
COORDINATED BY WILLIAM NUGENT

House "B"—This house in contrast to "A" and "C" is enriched by the texture of the Harold Jones Lavan siding. The 10'-high entrance door is an ice blue. This door and the ice blue canopy at the courtyard between the living room and the master bedroom are the only departure from the total color of the building. The Mosaic tile floor in hacienda beige provides an excellent foil for the simple lines and pure color of the contemporary furniture.

Landscape plans are complete and the materials will soon be installed by the landscape coordinator, William Nugent. The total concept

(Continued on page 28)

BY KILLINGSWORTH, BRADY AND SMITH, ARCHITECTS



ALUMINUM SCULPTURE: A NEW TECHNIQUE BY JAN DE SWART

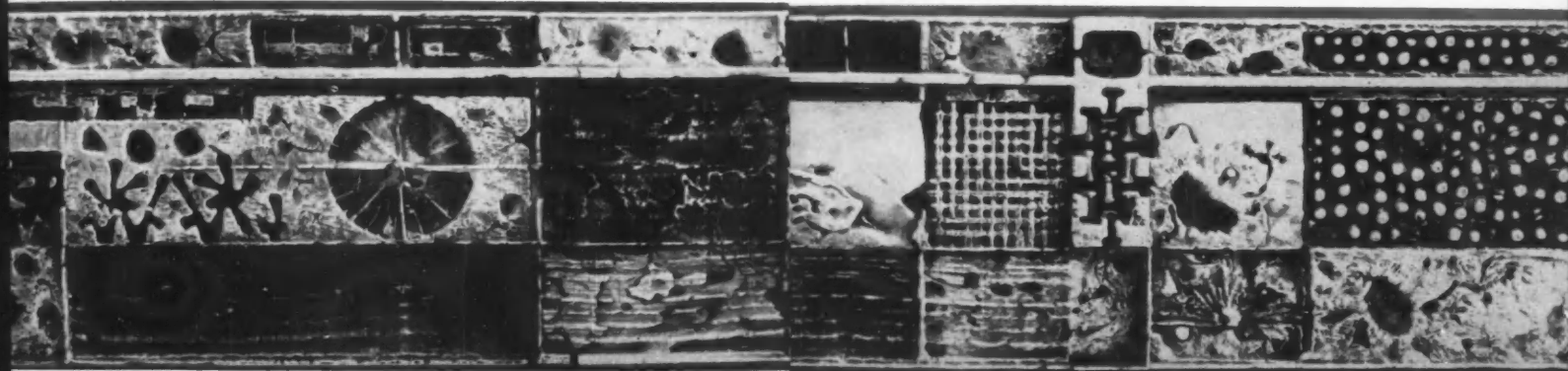


These pieces constitute individual sculptures as part of a 120-foot mural wall created and composed by Jan de Swart on the twenty-second floor of the new Kaiser Center in Oakland, California.

Inasmuch as in this project aluminum, in its most perfect mass-produced form, had been used for the wall itself, and in large part throughout the entire building, there was, I felt, a need for contrast, for something more primitive and enigmatic to counter-point the sophisticated surroundings. (Therefore, I turned to a metal casting technique which I had invented in the past year.) The mural wall is 120 feet long and 9 feet high. I decided to cast aluminum panels of various dimensions and compose them in tight groups in three areas of this long wall. Each grouping forms a visual unit made up of individual sculptures. Viewed from a distance, the panels constitute a mural; seen close up, each is a complete experience in itself; every casting being in sharp contrast with the others of the same group, complementing and accentuating its neighbors. It was necessary to develop a process of casting molten metal into forms of wood which undergo a controlled process of partial disintegration.

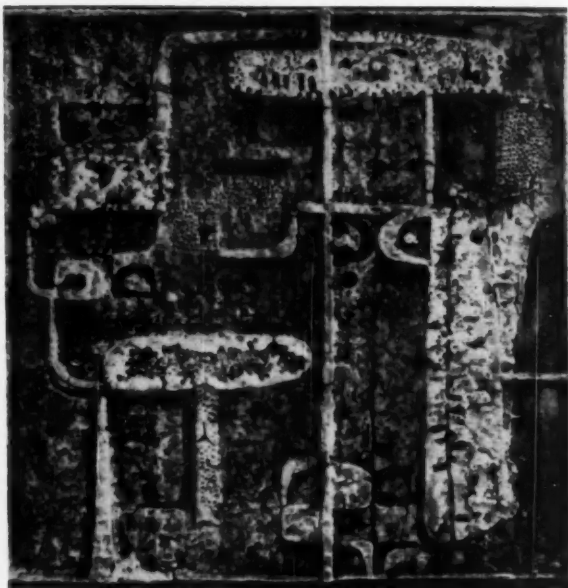
If the materials are carefully balanced they reveal their characteristics most dramatically in the freedom of their fluid state. When this exuberance is caught in the casting the organic struggle between the elements becomes visible. Deliberate planning, encompassing every detail, gives one complete control over the many complexities contained in each casting, even the structure of the surface and the final finish. It is unique in this process that all these elements are incorporated in the wood form. At the climactic moment when the piece is cast everything happens simultaneously: all the gases, chemicals, crystals, minerals, materials are instantly and finally fused into a harmonious whole.

This is a casting process of great depth and scope. It requires the will to create and the willingness to let creation take place. It is a process toward the organic, influenced by innumerable organizing forces that shape whatever is complete and balanced . . . where the ugly and the beautiful are one; where there is order in devastation; where the accidental is the most directed, the most adjusted; where there is no tension but all-tension; where meaning springs from the merging of opposites.—JAN DE SWART.





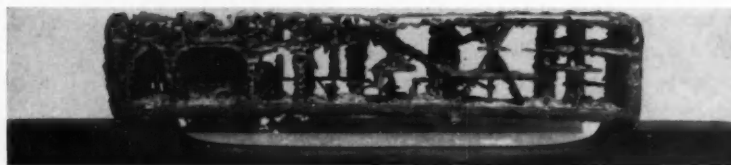
WOMAN



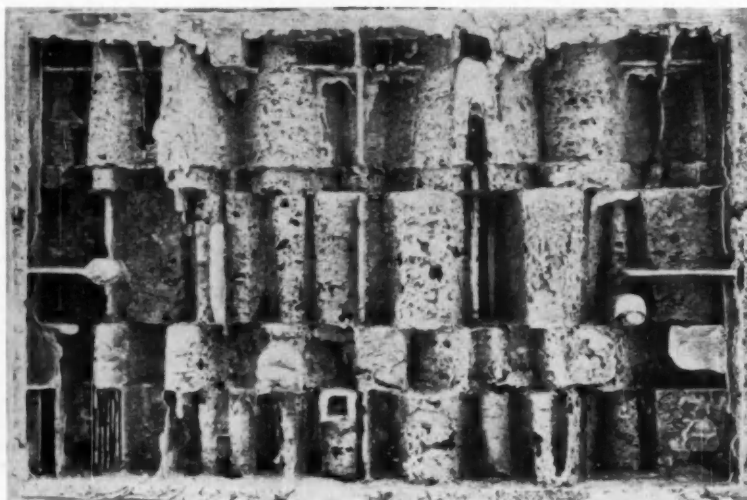
IN THE FOREST



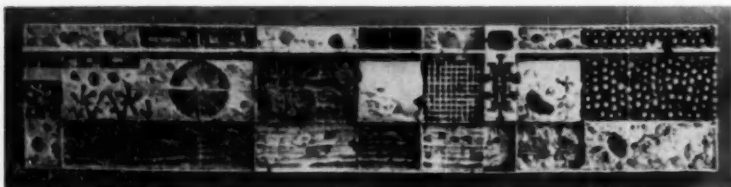
JAN DE SWART



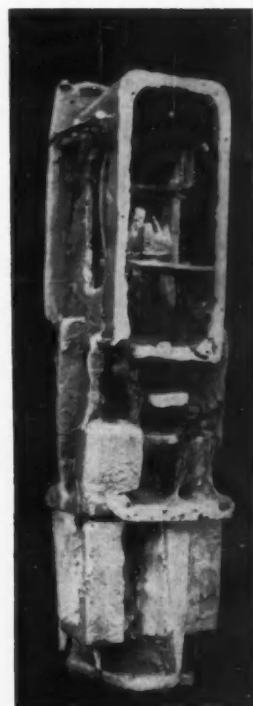
BRIDGE

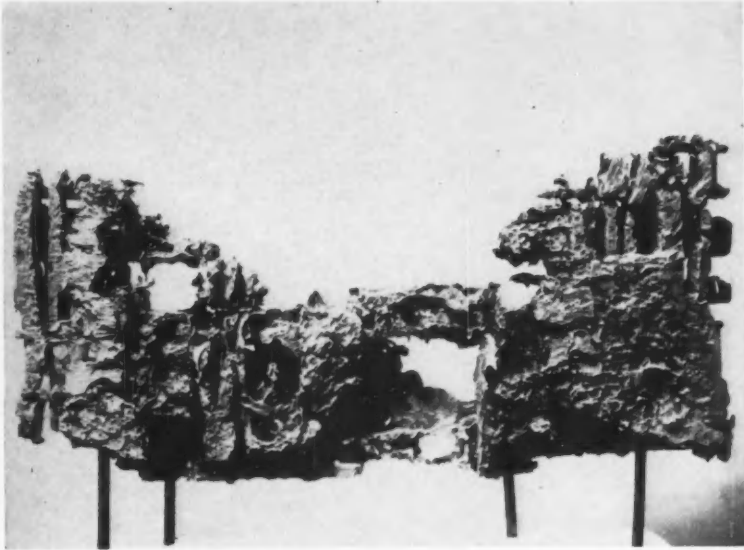


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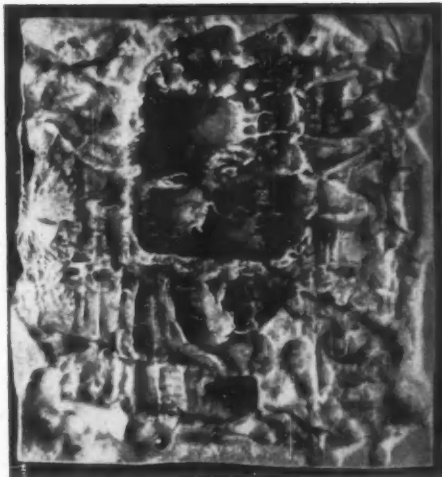


ARCHITECTURAL LANDSCAPE

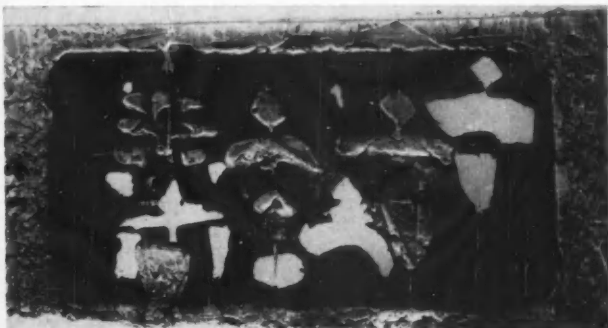




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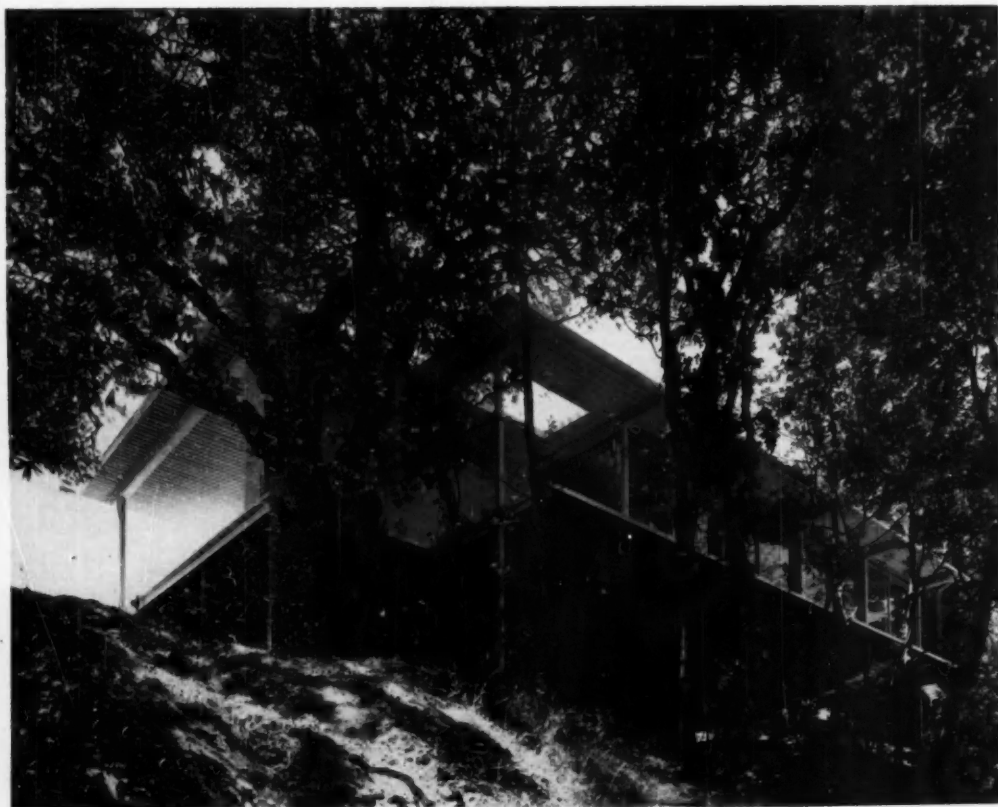
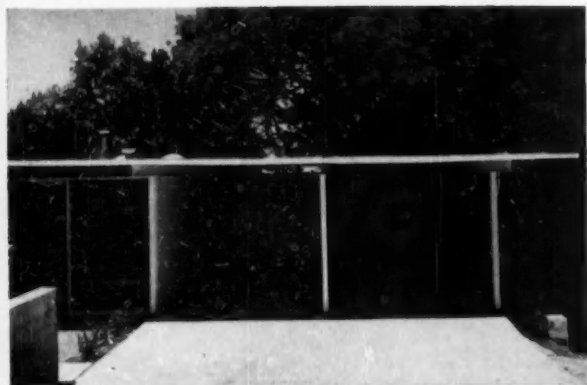
STALACTITE





A HILLSIDE HOUSE BY RAPHAEL S. SORIANO, ARCHITECT

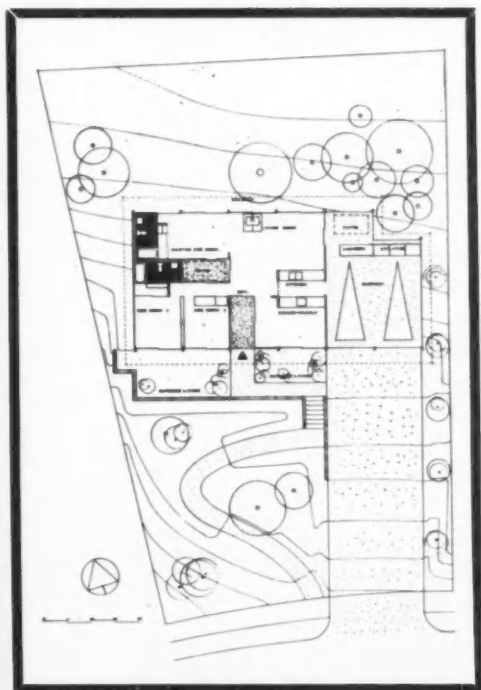
G. WISEBACH, ASSISTANT ARCHITECT

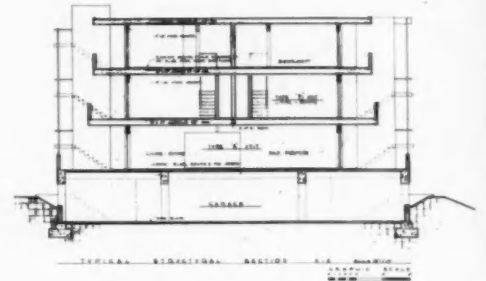
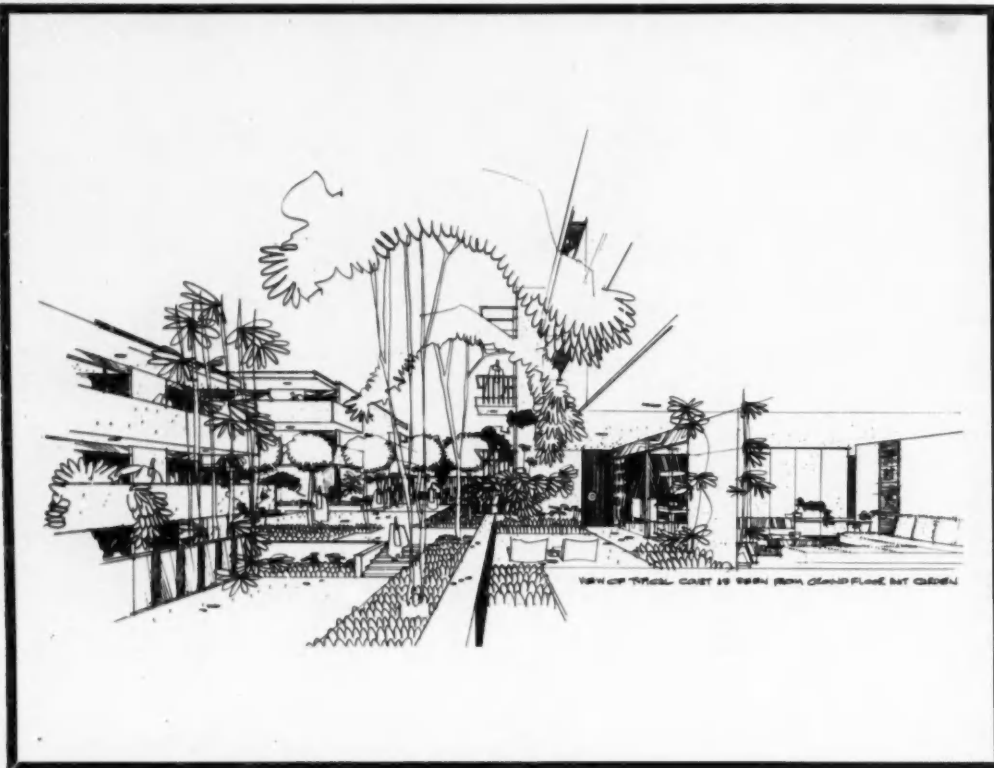


This is one of two pilot houses of steel developed for a hillside lot. The objective was to take full advantage of technological advances and production methods to produce a house with maximum performance at a competitive price. The problem was to design within approximately 1200 sq. ft. a house with three bedrooms, two baths, living room, family dining area, kitchen, plus a two-car port and utility and laundry area. The irregular site has a thirty-five-foot drop in 120 feet.

The simplicity in detailing and ease of erecting of all component parts was a maximum consideration. The framing system, of the lightest available steel columns and beams at 10' on center, spanning 30', was shop fabricated, trucked to the job and bolted to the foundation. The frame is covered with light gauze metal decking, spanning from beam to beam, and making a finished ceiling and roof to which Fiberglas insulation and a built-up roofing were applied.

The exterior space was enclosed with transparent, sliding, aluminum-frame doors bolted directly to the structure. Pre-assembled solid partitions of 1 1/8" sandwich plywood material were keyed into the pre-assembled steel angles with the frame. The elimination of all bearing walls made it possible to obtain maximum interior flexibility. Interior space was divided, as required, by cabinet "space dividers" in place of customary walls. All cabinets were pre-assembled in the factory and set into place after the building was enclosed.





REDEVELOPMENT PROJECT BY A. QUINCY JONES AND FREDERICK E. EMMONS, ARCHITECTS

The design represented here is one of garden and walk-up balcony apartments for family living in the heart of San Francisco. There are three basic floor plan types in the development. Two plan types are three bedroom with two baths, living room, dining, kitchen and family room. The third type is a four bedroom unit. All the four bedroom units will be at ground level for direct access to garden areas. All three plan types provide the full facilities of a three or four bedroom house. It is felt by the developer

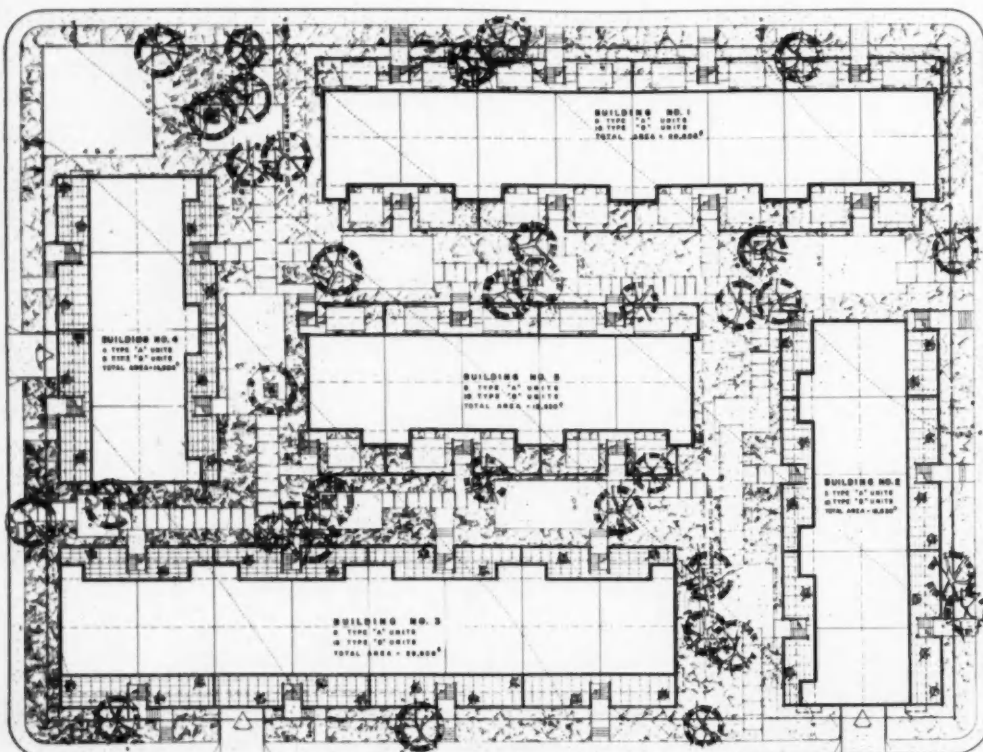
that this is the type space most needed in the central metropolitan area. The usual concept would have been to build one, two and three bedroom apartments.

Each apartment is provided with private gardens or balconies for both its living and bedroom areas, thus providing for the necessary separation of family activities not often considered in apartment design. The spaces between the buildings are landscaped to provide areas for quiet adult gathering and children's play in

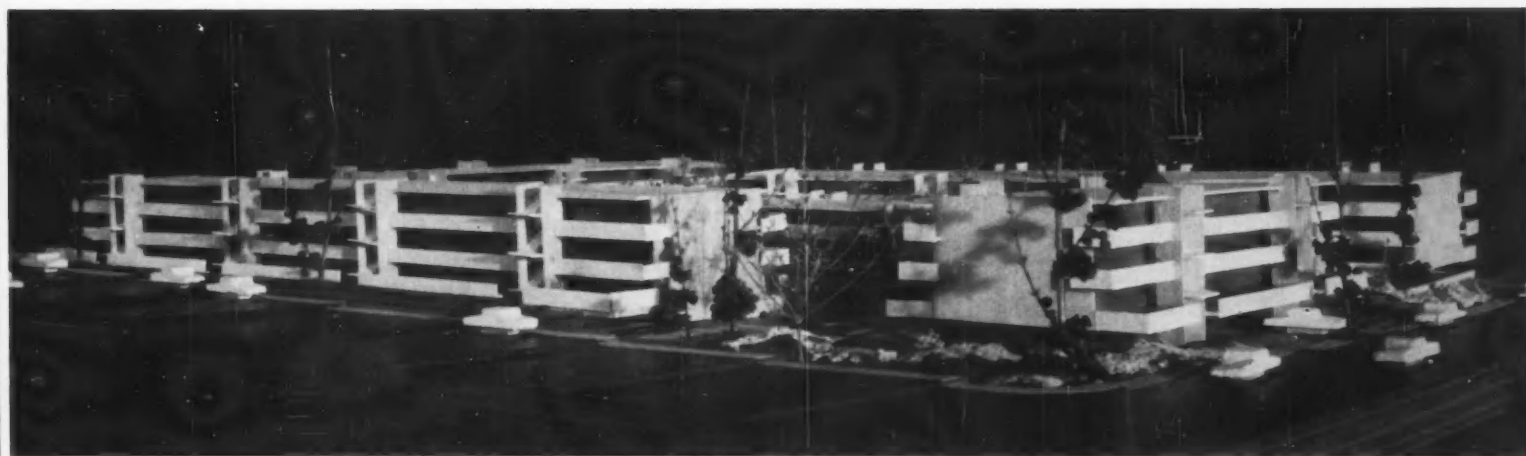
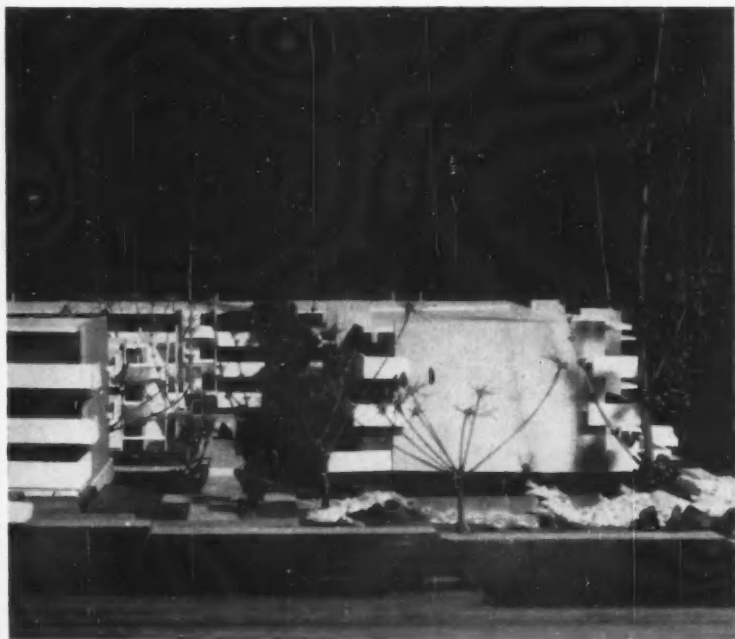
shady, green surroundings. The architect feels this character of repose is a necessary contrast to the bustling city that surrounds the development.

These units are planned so that to walk from the ground to the upper unit requires a climb of only one flight of stairs. The buildings are planned so that the maximum possible number of units have advantage of north, south and east exposures. The intent of this development is to sell the units on a cooperative basis. A separate

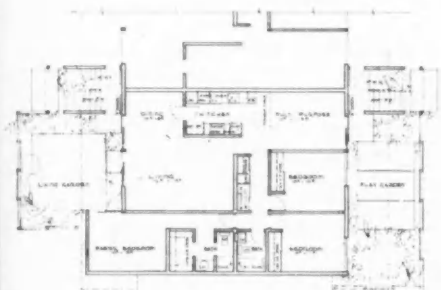
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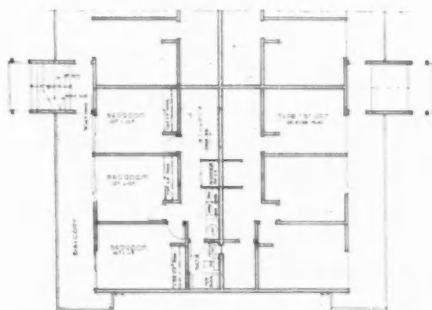
TYPE "A" UNIT ALTERNATE
FIRST FLOOR PLAN
LIVING-DINING
KITCHEN
4 BEDROOMS
2 BATHS



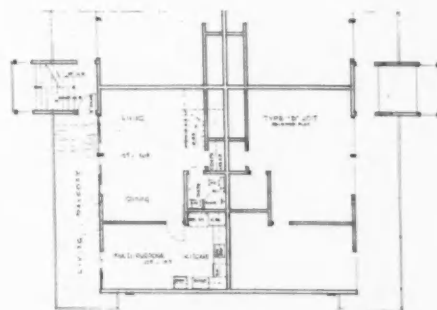
FOR EICHLER HOMES, INC.



TYPE "A" UNIT
FIRST FLOOR PLAN
LIVING-DINING
KITCHEN-MULTIPURPOSE
3 BEDROOMS
2 BATHS



TYPE "B" UNIT
THIRD FLOOR PLAN
LIVING-DINING
MULTIPURPOSE KITCHEN
3 BEDROOMS
2 BATHS



TYPE "B" UNIT
SECOND FLOOR PLAN
LIVING-DINING
MULTIPURPOSE KITCHEN
3 BEDROOMS
2 BATHS

PRODUCTS

merit specified

For Case Study House Triad

Designed by Killingsworth, Brady and Smith, architects

The following are specifications developed by the architects for the Case Study House Triad and represent a selection of products on the basis of quality and general usefulness that have been chosen as being best suited to the purposes of the project and are, within the meaning of the Case Study House Program, "Merit Specified."

STRUCTURAL

Douglas Fir Framing and Glue-Laminated Beams—West Coast Lumbermen's Association, 1410 S. W. Morrison Street, Portland 5, Oregon.

Roofing and Insulation—Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

FINISHES

Wall Surfaces—

House A Resawn Redwood 1x4 Butt-Joint, California Redwood Association, 576 Sacramento Street, San Francisco 11, California

House B Philippine Lavan Siding, Jones Veneer and Plywood Company, P.O. Box 252, Eugene, Oregon

House C Philippine Lavan Siding, Jones Veneer and Plywood Company, Eugene, Oregon

Ceramic Tile—

House A Pomona Tile Manufacturing Company, 621-33 North La Brea Avenue, Los Angeles 36, California

House B The Mosaic Tile Company, Zanesville, Ohio

House C Gladding-McBean and Company, 2901 Los Feliz Blvd., Los Angeles 39, California

Acoustical Tile—Owens-Corning Fiberglas Corp., Toledo 1, Ohio

Paving Surfaces—

House A White Precast Concrete, Custom Casting, Inc., 21236 So. Figueroa, Torrance, California

House B Quarry Tile, The Mosaic Tile Company, Zanesville, Ohio

House C Brick, Davidson Brick Company, 4701 Floral Drive, Los Angeles 22, California

Paint—Pittsburgh Paints, Pittsburgh Plate Glass Company, Paint Division, Torrance, California

Peel Coating—Poly-Form Manufacturing Company, 1960 Del Dios Highway, Escondido, California

DOORS AND WINDOWS

Sliding Glass—Arcadia Metal Products, 801 South Acacia Avenue, Fullerton, California

Glide-All Sliding Wardrobe Doors—Woodall, Inc., 801 Valley Blvd., El Monte, California

Jalousie Windows—Louvre-Leader, Inc., 1045 Richmond Street, Los Angeles 33, California

FIXTURES

Plumbing Fixtures—Briggs Manufacturing Company, 6600 E. Fifteen Mile Road, Warren, Michigan

Fans and Hoods—Trade-Wind, Division of Robbins & Myers, Inc., 7755 Paramount Place, Pico Rivera, California

LIGHTING

Electric Fixtures—Lightolier, Jersey City 5, New Jersey

Luminous Ceiling—Integrated Ceilings, Inc., 11766 West Pico Boulevard, Los Angeles, California

Switches—Bryant Electric Company, Bridgeport 2, Connecticut

APPLIANCES

Ovens, Ranges, Refrigerators—Thermador Electrical Manufacturing Company, 5119 District Boulevard, Los Angeles 22, California

Waste Disposals and Dishwashers—Waste King Corporation, 3300 East 50th Street, Los Angeles 58, California

Electric Can Opener—Trade-Wind, 7755 Paramount Place, Pico Rivera, California

CABINETS

Carrier Cabinet Company, San Diego, California

FURNISHINGS

Frank Brothers, 2400 Long Beach Blvd., Long Beach, California

SKYLIGHT

Construction Plastics, 7926 West 3rd Street, Los Angeles 48, California

STEEL COLUMNS

Custom Bronze and Iron Works, Chula Vista, California

PLASTER

Perma-Wall, Inc., San Diego, California

REDEVELOPMENT PROJECT—A. QUINCY JONES AND FREDERICK E. EMMONS

(Continued from page 26)

recreation area, for larger groups, is provided south of the Y.M.C.A. building on Parcel H-1. This will serve the residents of all three parcels. Garage space is provided in reinforced concrete basements under the apartment buildings, furnishing one staff for each apartment under cover. This location allows the maximum use of space around the buildings for outdoor living.

The concept of the central laundry facility has not proven popular in projects of this type, so the developer intends to furnish a washer-dryer in each case. The units will be radiant heated with copper tubing placed in the floor construction. The garage construction up to and including the first floor level will be reinforced concrete. From the first floor level through the remaining three floors the construction will be wood frame. The stairs will be prefabricated steel units with each stair serving two apartments. For the upper floor apartments the doors from the stairs to the balcony will in effect become the front door of the unit.

The concept of the design was one intended to provide the same facilities in the heart of the city that a person normally would get in a single family residence in the suburban area. The open spaces between buildings will be as great as that which usually occurs in tract housing. The only difference being that in lieu of the usual rear yard outdoor living area each of these units will have either a garden on grade or a balcony, which in each case will be private to the individual unit. This project exemplifies one type solution for the development of existing sub-standard urban areas. Whether it be redevelopment or initial development of raw land, schemes for residential living must in the future take patterns of density such as this.

CASE STUDY HOUSE TRIAD—KILLINGSWORTH, BRADY & SMITH

(Continued from page 20)

of the planting has been directed toward continuity of the Triad, yet with individual interest for each of the parts. The dominant theme of the composition is the use of the 16'-0" tall 50 year old Oleo Europaea (olive) trees and large masses of color through the Petunia Hybrida. Two of the olives will be used at the forecourt of House "A" at either side of the landing. At the street level, Hedra Hanii (Hahns ivy) will be used as a low light green foil to the grayed lavender of the flowering ground cover at the 3'-0" lower level. Cissus Capensis (evergreen grape) will be espaliered at the extremities of the redwood front walls. The pale yellow green of the evergreen grape provides a fine background for the grays of the olive trees and the sepia tones of the wood. The proper treatment for the formal entrance courtyard has provided quite a problem. The original concept provided rows of match clipped Ficus trees on either side of the pool. Upon examining the space of the court when it was framed, this obviously was not the right solution. The present solution seems right with simply matched espaliered evergreen grape on the walls on either side of the pool. This simple form is repeated in the massing of white petunias at the pool line to the base of the walls. This may once again be changed when the pool is completed. It may be necessary to achieve a major repetition on either side of the pool. If so, the grape will be kept, but huge white pots, five on a side, will be set upon a simple base set in turn on the fine texture of Hahns ivy. These will be planted with clipped Raphiolepis introducing pale pink flowers and deep sepia berries into the composition. The planting at the master bedroom courtyard will be developed to feature the fine Italian sculpture set on the basic axis in a balanced composition. On either side of the sculpture ferns will be grouped. On each side of the white Pomona Tile terrace, yellow violas will be spread.

The total composition will be featuring the grayed-white tones of the sculpture, set against the muted sepia of the redwood walls with the pale greens on either side of the ferns. At the base and as a softening element for the white tile terrace, the ochre yellows of the violas will be placed. The terrace to the west off the living room will be sheltered by screen planting from the hot sun. On the east side of the screen wall Dicksonia Antarctica and Hawaiian tree ferns will be combined. The terraces and the view to the north from the living room have become a special problem. The view is magnificent with the total coast line to the north, but unfortunately the utility companies have dominated the view at the 4'-6" level with a major black cable and several minor obtrusive wires. The cost of moving these cables and wires would be prohibitive. The solution then ap-

appears to be the de-emphasizing of the problems with low screen planting to a 3'-0" level and a system of delicate stemmed trees through which the view is seen subordinating the smash of the ugly wires. The screen planting is shown as *Xylosma* and *Grewia* combined. The trees are shown as *Acacia Podalyriaefolia*. These may change to a bank of lemon eucalyptus (*Citradora*). The motor court from the kitchen will be screened by a native sycamore (*Platanus Racemosa*) set in a huge tub.

House "B" and "C" courtyard—On either side of the drive a huge banking of *Petunia Hybrida* will be set in shades of grayed-lavender and white. At the top of the 9'-0" incline, the *Olea Europaea* (olive) are located in a base of large rock outcropping. At the focal point of the drive and the base of the hill above and beyond the house there will be a clump of *Jacaranda Acutifolia*, *Prunus Cerasifera* and *Albizia Julibrissin*. The whole of the hillside will be a combination of *bougainvillea* and *Streptosolen Jamesonii*.

House "B"—At the front of the reflecting pool a bank of ice blue petunias will be set against the white walls; on either side of the ice blue door *Cissus Capensis* (evergreen grape) will be espaliered. The longer tendrils will be spread up and over the suspended trellis over the pool. The intimate inner courtyards will be planted with Cycads which will provide a delicate symmetry to the total composition. At the view end of the courtyard *Cedrus Deodar Compacta* will frame the view.

House "C"—At the front of the reflecting pool a bank of the ice blue petunias will be set reflecting the theme of House "B" and the unity of the Triad. The focal point of the entrance hall is an intimate garden. This is planted with banks of ferns; *Dicksonia Antarctica* and Hawaiian tree ferns, with base cover of *Hexilino* (baby tears) and matched rock paving. The view from the living room is seen through a fern grouping at the corner of the terrace and a view to the fine old olive tree. *Nandina Compacta* is silhouetted against the *Factrolite* glass screen. The master bedroom is partially screened to the northwest by a large clump of *Acacia Podalyriaefolia* with base planting of *Viburnum Robustum* and *Xylosma Senticosa*. The screening off the master bath and secondary bath is softened by vines of *bougainvillea* and *Wisteria Floribunda* with base planting of delicate ferns and Hahns ivy.

THE VISUAL ARTS TODAY—GYORGY KEPES

(Continued from page 13)

importance in transforming our world of chaos into order. The new setting, both natural and man-made, has its own dimensions of light, color, space, form, texture, rhythm—a wealth of qualities to be apprehended and experienced. A grasp of the new conditions, on the sensed and the emotional levels, may yield forms and images that provide a vision of contemporary reality.

In the crisis of scale presented by the complex condition in which we now live, we face two different but related obstacles to meeting its challenges. One is the corruption of our visual surroundings by cultural forces divorced from art; the dirt and clutter of the uncontrolled and ugly man-made environment infect us and numb our capacity to see. The other is the discouragement of our creative artists in the face of a surrounding chaos and a new scientific prospect, both seemingly too vast for them to comprehend.

Industrial civilization has propagated conditions that poison not only the body but also the spirit of man. We are justifiably alarmed about the dangers of radiation fallout. But the smoke, the dirt, the meagerness of the space in which men are forced to live, the lack of color and light, the corrosion of the best qualities of man's creative work—these are a fallout at least as dangerous. We speak today of safety levels, and watch out for the number of milliroentgens in our surroundings, but neither now nor in the past have we accorded recognition to the importance of the safety levels of our daily lives. We worry very little about mitigating the boredom of repetitive work—a killer of the spirit. We make no move toward arresting the waste of creative energies devoted to inane gestures or toward restoring the fading courage of man amid his progressive isolation. For the tragedy of democracy is the chaos of communication: the three-hundred-ring commercial circus of advertising, public relations, slick magazines, and fatuous entertainment. To most people ideas and values are imparted by middlemen whose objectives are crassly narrow and nonsocial.

Our sensibilities have been so starved as to have become in general untrustworthy. Some of the discourse in these pages

would have been obviated if the contemporary scene were not so vast, noisy, confused, and contradictory, and also if its values were accessible, if we could all cope with its tangle of communications, uncompromised by exposure to the sights and sounds of a crudely commercial civilization. But we are compelled to use the aids of sociological and psychological interpretation as correctives to our vision in order to grasp the real value of man-created visual images. We need, therefore, more than the artist's capacity to respond strongly to aesthetic facts: we also need clear, comprehensive thinking.

As many have remarked, men who have acute sensibility and can also exert disciplined rational thinking are rare. Artists are deeply committed to their eyes, they can bring their passionate vision to the most intense focus; but as a rule they lack impeccable logic and manipulative skill in verbal communication. In addition, they are understandably reluctant to translate from their own concrete, sense-bound language into an alien and unaccommodating language of pale, abstract, verbal signs—this is not the area of their competence. The other side of the situation is the cheerful willingness of persons to compensate for their undeveloped sensibilities by making public statements about art, building elaborate speculative structures from limited or secondhand data. Such speculations, unless combined with a direct experience of the unique meanings of visual forms, are unlikely to contribute to genuine understanding. The eye has no surrogate, and the sensibility of artists' eyes is an absolute requirement for reading the potentialities for human life inherent in the new scale of events.

The task of adjustment is only part of our traffic with the expanded environment—we also need to reach out for its gifts of new insights and values. Artists have responded variously to our crisis of scale. Some have moved toward accepting its challenges, and have turned their eyes and minds outward upon the expanded world and its new promise. Others have been overwhelmed, and have turned inward upon themselves, contracting their world and widening the gap between outer and inner perspective.

Some major artists of the preceding generation—Juan Gris,

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Piet Mondrian, Fernand Léger, and the architects who shared their new kind of vision—opened their eyes to the wealth of the industrial civilization and tried to bridge the gap between a rational and an emotional understanding of it. They accepted science and technology as a value, and welcomed the visual forms generated by the new conditions of modern life. Artistic goals were also tools for a proposed social transformation; in a period of social upheavals and revolutions, of disillusionment and pessimism, they had an absolute faith in the future, they created an aesthetic of dynamic space and precise, clear, machine-inspired forms, and in their working theories they employed such key words as "honest," "functional," "economical," and "architectonic." They developed a deep sense of interdependence, between man and environment and between man and man, as embodied in the painting of pictures or the shaping of buildings.

We see now that these men were overoptimistic and overconfident: the problem was bigger than they knew. Creative artistic use and interpretation of the values latent in our technical civilization required a profound confluence of art and science—sensitivity and knowledge—a stage difficult to envisage, let alone assume. A completely successful solution of artistic problems could not develop while human minds were splintered, while men lived in a world divided—socially, politically, personally. Although the architectonic vision was one of the stirring achievements of our century, it lacked the breadth to comprehend both our outer and inner worlds.

The modern failure to achieve common boundaries is symbolized in some of the authentic documents of the recoiling mid-century mind, especially in the manner these are presented to our view. A beautiful crystalline structure in America's greatest city (itself a symbol of the finest thinking in contemporary architecture and at the same time, like the *torre* of medieval Tuscany, a boastful symbol of wealth and power) displays, in surroundings that state an absolute control of contemporary materials and techniques and a perfect mastery of the new beauty of architectural space, images of the torn and broken man. In its offices and corridors are paintings and sculptures shaped with idioms in tune with the twilight spirit that created them: surfaces that are moldy, broken, corroded, ragged, dripping; brush strokes executed with the sloppy brutality of cornered men.

To the men of today's generation, the key words of yesterday have too bold and confident a ring. Some of these men retire to the caves and jungles of the unconscious and explore contracting spirals diminishing toward oblivion. Others go slumming in inner areas of corrosion, burning and tearing—displaced persons who tour the inner ruins much as, in the last century, the Romantics toured the ruins of the outside world. Still others mark time, finding a way of staying in the same place but keeping their sojourn interesting: these immerse themselves in gadgetry, playing inside elaborate boxes of colors, lines, and spatial layers, obsessed with the precision of relationships and the refinement of space effects, narrowing more and more the visions they had two decades ago. Rather than accept the creative challenges within the range of the visual arts, rather than learn to see a broader world, most of us, our artists included, divorce ourselves from common obligations, turn our

backs on the rational, and separate man from himself, from his fellow men, and from his environment.

The artistic expression preferred at this point in time is fluid, amorphous, and undefined. Although the best among contemporary artists have created images of a shining inner structure in spite of all programs, there is spreading in this sophisticated world a new type of artistic image that has made a central principle of the unformed, the irrational, and the uncontrolled. The created image is constricted in space and meaning, and is reduced to the elementary experience of the kinesthetic pleasure of the act of painting. Some painters limit their horizon to the space within physical reach: others require a direct sense of physical contact with their space-creating image. Jackson Pollock, whose work has had a major impact on the present generation, once commented, "My painting does not come from the easel. I hardly ever stretch my canvas before painting. I prefer to tack the unstretched canvas to the hard wall or the floor. I feel nearer, more a part of the painting, since this way I can walk around it, work from four sides, and literally be in the painting." The bright-colored *hortus occlusus* of the medieval painter finds its faded twentieth-century projection in this picturing of a nest, with the creative act weaving a blanket against the chilling wind of memories.

Another painter, Willem De Kooning, has written:

"The space of science—the space of the physicist—I am truly bored with by now. Their lenses are so thick that, seeing through them, the space gets more and more melancholy. All that it contains is billions and billions of hunks of matter, hot or cold, floating around in darkness echoing the great scheme of aimlessness.

"The stars I think about, if I could fly I could reach in a few old-fashioned days. But physicists' stars are used as buttons, buttoning up curtains of emptiness. If I stretch my arms next to the rest of myself and wonder where my fingers are—that is all the space I need as a painter."

Here the total world, the common world that unites the thinking mind, the motivating heart, and the acting body, is denied an unity, for such a unity seems beyond hope. It takes a special courage today to face the heavy odds of a blighted landscape; the vulgar faces of cities; the hard, mechanical rhythm of the industrial scene, so out of time with our heartbeats, our desires, our hopes; and the fantastic expanse of cosmological pattern, from ultramicroscopic to superastronomical, unrolling from the looms of science. It takes still more courage to take this whole as a whole.

Before now in history, men have risen to the creative challenge of altering human consciousness in order to orient themselves on a higher level. Through such modifications of consciousness we have become manifestly distinguishable from the biologically identical men of the Ice Age. Artistic sensibility has had its role in this process, in teaching all of us to see and in developing models and symbols from which concepts have been built.

There can be little doubt that this is an age of extraordinary vitality and promise. It calls upon artists for more than strong protest: its enormous potential for undreamed-of harmonies and rhythms demands new levels of sensibility, a new capacity for unification, a new creativity. Our buildings of glass and steel

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rival nature's structures in their size and strength; the lights of our cities recall the glories of medieval stained-glass cathedral windows in their richness and purity; small electronic tubes rival the flowers in their delicacy and order. There are new values: the speed and precision of machines; the energy of a dynamic society; the new ranges of space opened by science and technique. There are a host of exciting new images arising in a hundred different fields of science. The new scale is not a disaster.

Machine rhythms can be tamed, they can become the rhythms of human needs. Blight in the man-made environment can be repaired, and with it the corrupting damage inflicted upon twentieth-century men. Artists can explore the new science-born horizons, make them accessible to our common perception, and develop consistent, orderly images and symbols. The public can be brought to an appreciative understanding of the minds and feelings of creative people.

Our scientific perspective, our cultural legacy, and our art too, can help bring our sensations, feelings, attitudes, and thoughts into harmonious correspondence with the broad movements of nature and society. But our transformation of ourselves and our surroundings must proceed from a knowledge that we can meet new circumstances and grow with them.

We can move once more with confidence through the world, provided we unify our experience of eye and mind. Symmetry, balance, rhythmic sequence express essential characteristics of natural phenomena: the connectedness of nature—the order, the logic, the living process. Here science and art can meet on common ground. The challenge of scale can be met only if we broaden the base from which we view and live the world. We must use our faculties to the full—with the scientist's brain, the poet's heart, the painter's eye. Through our scientific knowledge we are aware of the biological and psychological requirements of men, and so can begin the restructuring of the man-made world and restore the balance between men and their surroundings. The symbols of order needed for this major task may be drawn from the poetry of image awaiting the explorer of new horizons.

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MUSIC

(Continued from page 8)

Among all the virtuosi I have known I have never seen such hands as those of Mr. Lui, long, slender as a bird's foot, and seeming all muscle over a fragility of bone. They recalled to me a description of the hands of the great pianist Ferruccio Busoni, as a friend of mine who played for Busoni when she was a child saw his hands hanging before him, curved like an eagle's claws by the muscular act of playing.

There is another sort of hand, and I watched it moving across the face of a long drum in the Javanese *gamelan*. It is capable of an absolute flatness, such as we never see among European musicians, and every part of this flat hand is separately capable of striking the drum-face by an angular undulation, without curving. I knew that this musician had been trained from boyhood to play the drum with his hands, and I identified him later as Hardjo Susilo, the Indonesian musician. When he came before the curtain to sing extracts of poetry from the *Tjintini*, the epic poem of Java, he walked slightly bending forward, his toes turned out, a decorum so entirely of the culture he represented that to move like that was a gesture as distinctive as the *Kelana* dance gestures of the warrior before battle he performed for us in full costume with magnificent intensity.

In this one particular the hands of Mr. Lui and of Mr. Susilo are alike; they are capable of becoming absolutely flat. A Westerner can flatten his hand, but he has never been accustomed to flatten it absolutely; always some portion of the hand curves, at palm or finger-tip or in the articulation of the thumb and palm. In the musculature of a hand capable of such flattening the articulation of thumb and palm are distinct, Mr. Lui's thumb appearing almost as long and independent in action as another parallel finger. The cause of this flat hand, however developed by instrumental training, would seem to be not the instrument but the use of the hand for many other purposes in a culture where the articulate hand serves the purpose of common implements and tools that our hands grasp. You will observe a similar flat hand, less articulately developed, among Negroes newly come out of our non-urban Deep South. The formally leaning walk,

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the formal movements of the dance, the formal positioning of the hands playing instruments report a constituency of habit we are likely to misrepresent, if we derive external rules for them and think of them as "ethnic."

If Mr. Lui's virtuosic display on the *pipa* rather effaced the stylistic distinctions of the music, his more reserved performance on the *chin* fortunately did not. This hollow log, flattened and most delicately worked to make a resonating sound body, is the ancestor of the larger Japanese *koto* and relates to the *koto* in the same manner as the Western clavichord to the harpsichord. The *chin* has seven strings, the *koto* thirteen. The *chin* sounds most delicately as a solo instrument, too soft to be accompanied by any instrument except a flute; the *koto* can be an orchestral or a solo instrument. Mr. Lui strings his 700 year old *chin* with nylon strings, admitting that the nylon strings are less resonant, though probably not less loud, than the original silk strings. He did not make clear his reason for doing so. A similar differentiation applies to the use of nylon plectra on the harpsichord; they produce tone less mellow than that of buff leather plectra and give less overtone than the older quill plectra.

I regret that Mr. Lui did not divide his recital more evenly between the two instruments, playing the *chin* only twice, so that our inability to adjust our attention at once to the more delicately expressive sounding of this very ancient instrument prevented us from more than grasping at its extraordinarily sensitive and reticent art. As the seldom heard clavichord is among the most demanding and expressive of European instruments, so it seems to me at first contact that the *chin* is among Oriental instruments.

I was sorry to miss the much praised flute playing of the Indian musician Tanjore Viswanathan and also the lecture by Robert Brown on Improvisation in South Indian Music which accompanied this recital.

The first program I attended was given by a group whose work I have previously reported, a program of *Gagaku*, Japanese Court or Ceremonial music, which survives, however modified by passage of ten centuries, from its time of ascendancy, the Heian period until the rise of the Shinto religion during the

twelfth century. This aristocratic and priestly art has never been known or practised by the common people of Japan.

The Heian period corresponds to the Provençal period of courtly love, poetry, and music in Europe, but it lasted longer and its peculiar manifestations pervaded all aristocratic society as a positive force, involving rulers and warriors as well as courtiers and women, whereas the Provençal culture seems to have been in part a refuge of small groups of educated women and their adherents against the illiterate brutality of the world around them. The Heian society set a more lasting value on its culture, which has remained the high standard of all Japanese esthetic thinking until the present day. This was nevertheless a culture of refuge against conditions prevailing beyond the narrow radius of the court; and to be exiled from court was to be cut off, as in France during the Bourbon predominance to be removed from Paris was to be deprived of any culture and society except that which one possessed within oneself.

Gagaku has been for centuries a sterile, non-creative art, surviving among families of musicians who perpetuate the literature and the method of performing it by mnemonic training: the young musician learns by heart the traditional melodies before beginning to study an instrument. Thereafter he progresses through the orchestra by seniority, until he reaches at last the double-end drum of the orchestral leader.

In 1959, for the first time, the Imperial Court Orchestra of Japan, released by the Emperor from traditional duties and privileges, toured this country, the tour ending at the University of California. To illustrate the insulation of Oriental musicians from music not of their own area, at the University these Oriental musicians heard for the first time a *Gamelan* orchestra. They announced themselves to be so impressed by the playing of the University *Gagaku* group that they consented to devote several days to teaching its members. They also recorded for *Decca*, though a year later this record, perhaps the only extant high-fidelity recording of *Gagaku*, has not to my knowledge been issued. After returning to Japan they were instrumental in gaining permission for the University musicians to dress in the traditional costume of the Court orchestra. Thus the ancient practice of adoption by which the musical tradition of the Court orchestra has been retained and carried forward through a small group of traditional musician families was translated into a new dimension, and the University group became in a sense the latest inheritors of the tradition. Unless their work catches on thoroughly enough in its new surroundings to establish itself as part of a new vogue of Orientalism in Western musical studies, they may well be the last inheritors.

CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

Editor's Note: This is a classified review of currently available manufacturers' literature and product information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes it on the coupon which appears below, giving your name, address, and occupation. Return the coupon to *Arts & Architecture* and your requests will be filled as rapidly as possible. Listings preceded by a check (✓) include products which have been merit specified for the Case Study Houses 18, 20, 21, The Triad.

APPLIANCES

✓(350a) Appliances: Thermador presents two new brochures. The 14.2 cubic-foot Refrigerator-Freezer is featured in one brochure. All sections of the interior are explained in full; choice of colors and detailed specifications are given. The second brochure colorfully illustrates Thermador's Bilt-In Electric Ranges. The special features of the Bilt-In Electric Ovens, such as the Air-Cooled door, 2-speed rotisserie, scientifically designed aluminum Broiler tray, are shown. The Thermador "Masterpiece" Bilt-In Electric Cooking Tops are detailed. For these attractive brochures write to: Thermador Electrical Manufacturing Company, 5119 District Boulevard, Los Angeles 22, California.

ARCHITECTURAL METAL WORK

(294a) Architectural Interior Metal Work: Specializing in the design and fabrication of decorative metal work, murals, contemporary lighting fixtures and planning, room dividers, and decorative fixtures of all types for stores, office buildings, restaurants, cocktail lounges, hotels and homes. Sculptured metals, tropical hardwoods, mosaics, glass and plastics are used in the fabrication of these designs. Send for information and sample decorative plastic kit, Strickley & Company, 711 South Grandview Street, Los Angeles 57, California.

ARCHITECTURAL POTTERY

✓(303a) Architectural Pottery: Information, brochures, scale drawings of more than 50 models of large-scale

planting pottery, sand urns, garden lights, and sculpture for indoor and outdoor use. Received numerous Good Design Awards. In permanent display at Museum of Modern Art. Winner of 1956 Trail Blazer Award by National Home Fashions League. Has been specified by leading architects for commercial and residential projects. Groupings of models create indoor gardens. Pottery in patios creates movable planted areas. Totem sculptures available to any desired height. Able to do some custom work. Architectural Pottery, 1107 North Kings Road, Los Angeles 46, California.

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DECORATIVE ACCESSORIES

(426) Contemporary Clocks and Accessories. Attractive folder Chronopak contemporary clocks, crisp, simple, unusual models; modern fireplace accessories; lastex wire lamps, and bubble lamps, George Nelson, designer. Brochure available. One of the finest sources of information, worth study and file space.—Howard Miller Clock Company, Zeeland, Michigan.

(300a) Home Furnishings: A series of brochures illustrating its new line of contemporary home furnishings and decorative accessories is now available from Raymor. Clocks, wall decor, Scandinavian and domestic furniture, lighting, occasional furniture and many artware and decorative accents are among the units newly cataloged. All literature is available to the trade upon written request on professional letterhead. Inquiries should be addressed to Raymor, 225 Fifth Avenue, New York 10, New York.

DOORS AND WINDOWS

✓(244a) Sliding Doors & Windows: The full product line of Arcadia Metal Products entails a standard aluminum door used for residential purposes, heavy duty aluminum door for commercial work and finer homes, standard steel door for commercial and residential buildings and the standard aluminum window designed for architecturally planned commercial buildings and residences. For a 16-page informative catalog write to: Arcadia Metal Products, Dept. AA, 801 S. Acacia Avenue, Fullerton, California.

(222a) Architectural Window Decor: LouverDrape Vertical Blind's colorful new catalog describes LouverDrape as the most flexible, up-to-date architectural window covering on today's market. Designed on a 2½ inch module, these vertical blinds fit any window or skylight—any size, any shape and feature washable, flame-resistant, colorfast fabric by DuPont. Specification details are clearly presented and organized and the catalog is profusely illustrated. Write to Vertical Blinds Corp. of America, 1710 22nd Street, Santa Monica, California.

(332a) Jaylis Traversing Window Covering—Room Dividers: Constructed from DuPont Lucite and DuPont Zytel Nylon; reflects 86% infrared rays and absorbs 99% ultra-violet rays; low maintenance cost; lasts a lifetime; may be used indoors or out;

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✓(307a) Fabrics: Anton Maix Fabrics for architecture. Outstanding collection of printed designs by finest contemporary designers. Unique casement cloths for institutional requirements. Coordinated upholstery fabrics. Plastics & synthetics. Special finishes. Transportation materials. Custom designs. Nat'l sales office—162 E. 59th St., N. Y. 22, N. Y. Showrooms in Los Angeles, San Francisco & New York. Write for illustrated brochure and coordinated swatches: L. Anton Maix, 162 East 59th Street, New York 22, New York.

FURNITURE

(358a) Manufacturers of contemporary furniture, featuring the Continental and "Plan" Seating Units, designs by William Paul Taylor and Simon Steiner. Selected Designs, Inc., 9276 Santa Monica Boulevard, Beverly Hills, California.

(345a) Office Furniture: New 80-page Dunbar office furniture catalog; fully illustrated in black and white and four colors; complete line designed by Edward Wormley; collection includes executive desks, storage units, conference tables, desks and conference chairs, upholstered seating, occasional tables and chests, and a specially screened series of coordinated lighting and accessories; meticulous detailing, thorough functional flexibility. For free copy write to Dunbar Furniture Corporation of Indiana, Berne, Indiana.

(248a) Furniture: Paul McCobb's latest brochure contains accurate descriptions and handsome photographs of pieces most representative of the McCobb collections of furniture. Write for his reference guide to Directional, Inc., Dept. AA, 8950 Beverly Boulevard, Los Angeles 48, California.

* Catalogs and brochure available on leading line of fine contemporary furniture by George Kasparian. Experienced custom/contract dept. working with leading architects. Wholesale showrooms: Carroll Sagar & Assoc., 8833 Beverly Blvd., Los Angeles 48, Calif.; Bacon & Perry, Inc., 170 Decorative Center, Dallas 7, Texas; Executive Office Interiors, 528 Washington St., San Francisco 11, Calif.; Castle West, 2360 East 3rd, Denver 6, Colo., Frank B. Ladd, 122 West Kinzie Street, Chicago, Illinois. For further information, write on your letterhead, please, directly to any of the above showrooms. Kasparians, 7772 Santa Monica Blvd., Los Angeles 46, California.

(325a) Chairs: 10-page illustrated catalog from Charles W. Stendig, Inc., shows complete line of chairs in a variety of materials and finishes. The "Bentwood Armchair," "Swiss" aluminum stacking chair designed by Hans Coray, "H-H" steel and leather chair are a few of the many pictured. Well designed line; data belongs in all files. Write to: Charles W. Stendig, Inc., 600 Madison Avenue, New York 22, New York.

(270a) Furniture (wholesale only): Send for new brochure on furniture and lamp designs by such artists as Finn Juhl, Karl Ekselius, Jacob Kjaer, Ib Kofod-Larsen, Eske Kristensen, Pontoppidan. Five dining tables are shown as well as many Finn Juhl designs, all made in Scandinavian workshops. Write Frederik Lunning, Inc., Distributor for Georg Jensen, Inc., 315 Pacific Avenue, San Francisco 11, California.

(180a) Furniture: A complete line of imported upholstered furniture and related tables, warehoused in Burlingame and New York for immediate delivery; handcrafted quality furniture moderately priced; ideally suited for residential or commercial use; write for catalog.—Dux Inc., 1633 Adrian Road, Burlingame, California.

(138a) Contemporary Furniture: Open showroom to the trade, featuring such lines as Herman Miller, Knoll, Dux, House of Italian Handicrafts and John Stuart. Representatives for Howard Miller, Glenn of California, Kasparians, Pacific Furniture, String Design (manufacturers of shelves and tables), Swedish Modern, Woolf, Lam Workshops and Vista. Also, complete line of excellent contemporary fabrics, including Angelo Testa, Schiffer, Elenhank Designers, California Woven Fabrics, Robert Sailors Fabrics, Theodore Merowitz, Florida Workshops and other lines of decorative and upholstery fabrics. These lines will be of particular interest to architects, decorators and designers. Inquiries welcomed. Carroll Sagar & Associates, 8833 Beverly Boulevard, Los Angeles 48, California.

(330a) Furniture: Herman Miller, Knoll and Modufarm contemporary furniture for executive and general office areas in steel—all steel equipment (A S E) showroom and display facilities available to architects and their clients. Write to The Hart-Cobb-Carley Company, 2439 South Yates Avenue, Los Angeles 22, California.

(347a) A new abridged 24-page catalog, containing 95 photos with descriptions of dimensions and woods, is offered by John Stuart Inc. Showing furniture produced from original designs by distinguished international designers, it is a storehouse of inspirations. 50c John Stuart Inc. Dept. DS, Fourth Avenue at 32nd Street, New York 16, N. Y.

✓(437) Furniture: Information best lines contemporary furniture, accessories, fabrics; chairs, tables in string and strap upholstery; wood or metal chair frames—Knoll Associates, Inc., 575 Madison Ave., New York 22, N. Y.

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(338a) Brown - Saltman / California, Brochures illustrating all elements and groupings of VARIATIONS modular furniture for living-room, dining room, bedroom. Please send 15¢ to: Brown-Saltman, 2570 Tweedy Boulevard, South Gate, California.

(323) Furniture, Custom and Standard: Information one of best known lines contemporary metal (indoor-outdoor) and wood (upholstered) furniture; designed by Hendrick Van Keppel, and Taylor Green—Van Keppel-Green, Inc., 116 South Lasky Drive, Beverly Hills, California.

(167a) Contemporary Danish and Swedish Furniture. Outstanding design and quality of craftsmanship. Information available to leading contemporary dealers and interior decorators. Pacific Overseas, Inc., 478 Jackson Street, San Francisco, California.

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✓(255a) Lighting Equipment: Skydome, basic Wasco toplighting unit. The acrylic plastic dome floats between extended aluminum frames. The unit, factory assembled and shipped ready to install, is used in several Case Study Houses. For complete details write Wasco Products, Inc., 93P Fawcett St., Cambridge 38, Massachusetts.

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SPECIALTIES

(152) Door Chimes: Color folder NuTone door chimes; wide range styles, including clock chimes; merit specified for several Case Study Houses.—NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

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(357a) Decorative Grilles: Sun-control and decorative grilles in all metals and finishes; 12 stock patterns for interior and exterior use. Can be used for ceilings, fluorescent louvers, overhead lattice work. Write for illustrated catalog. Nomad Associates, 1071 2nd Avenue West, Twin Falls, Idaho.

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(122a) Contemporary Ceramics: Information prices, catalog on contemporary ceramics by Tony Hill, includes full range table pieces, vases, ash trays, lamps, specialties; colorful, full fired, original; among best glazes in industry; merit specified several times CSHouse Program magazine Arts & Architecture; data belong in all contemporary files.—Tony Hill, 3121 West Jefferson Boulevard, Los Angeles, California.

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(146a) Fiberglas (T.M.Reg. U. S. Pat. Off.) Building insulations: Application data, specifications for insulating walls, top floor ceilings, floors over unheated space. Compression-packed, long continuous rolls, self-contained vapor barrier. Goes up quickly, less cutting and fitting. High thermal efficiency. Non-settling, durable, made of ageless glass fibers. Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

(113a) Structural Building Materials: Free literature available from the California Redwood Association includes "Redwood Goes to School," a 16-page brochure showing how architects provide better school design to day; Architect's File containing special selection of data sheets with information most in demand by architects; Redwood News, quarterly publication showing latest designs; individual data sheets on Yard Grades, Interior Specifications, Exterior and Interior Finishes. Write Service Library, California Redwood Association, 576 Sacramento St., San Francisco 11, Calif.

✓(349a) Available from the West Coast Lumbermen's Association is an excellent 44-page catalog entitled: "Douglas Fir Lumber — Grades and Uses." This well illustrated catalog includes detailed descriptions of boards, finish, joists and panels, and light framing with several full-page examples of each; conversion tables, stresses, weights, properties of Douglas fir. For a copy write to: West Coast Lumbermen's Association, 1410 S.W. Morrison Street, Portland 5, Oregon.

(184a) Masonite Siding: Four page bulletin describing in detail approved methods application of tempered hard-board product especially manufactured for use as lap siding. Sketches

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✓(309a) Structural Material: New construction data now available on Hans Sumpf adobe brick. This waterproof masonry is fire-, sound-, and termite-proof, an excellent insulator—ideal for construction of garden walls, lawn borders and walks. The bricks come in 7 sizes ranging from 4 x 3½ x 16 to 4 x 12 x 16. For further information write for free booklet to: Hans Sumpf Company, Route No. 1, Box 570, Fresno, California.

SURFACE TREATMENTS

(348a) New Technical Bulletin on Protective Coatings Offered: A new 8-page Technical Bulletin on "Protective Coatings for Exterior Surfaces of Concrete Block Walls" is now available free of charge to qualified building professionals. Prepared at the direction of Quality Block Producers, an association of leading concrete block manufacturers in Southern California, the Bulletin is the first of its type offered. Actual research, editing and writing was performed by Raymond S. Wright, AIA, & Associates, and the Paint & Coating Committee of the Construction Specifications Institute. No brand names are mentioned and recommendations for various coatings are notably unbiased and objective. The last page, Brief Specification Data, is perforated for easy removal and extra copies may be obtained without charge. Copies of this Technical Bulletin have already been mailed to a select list of building professionals. Readers not included in this mailing, or those desiring an extra copy, may obtain one by telephoning or writing: Quality Block Producers, Attn: Mr. Peter Vogel, 956 So. Hoover Street, Los Angeles 5, California. DU 5-0281.

(283a) Ceramic Tile: Write for information on new Pomona Tile line. Available in 42 decorator colors, four different surfaces, 26 different sizes and shapes. Ideal for kitchen and bathroom installations. Pomona Tile is practical; lifelong durability, resists acids, scratches and abrasions, easy to keep clean. No wax or polish necessary, exclusive "Space-Rite" feature assures even spacing. Top quality at competitive prices. Pomona Tile Manufacturing Company, 629 North La Brea Avenue, Los Angeles 36, California.

(336a) Surface Treatments: Vitroceam glazed cement finishes are being used by more and more architects where a hard, durable impervious surface is essential. Available in unlimited colors and multi-color effects, it is being used for interior and exterior over all types of masonry and plaster surfaces and over asbestos panels for spandrel and window-wall construction. For information and samples, please write to Vitroceam, P.O. Box 421, Azusa, California. EDgewood 4-4383.

✓(346a) Triangle Tile by Hermosa, 6" equilateral glazed ceramic triangles available in all Hermosa colors, in bright glaze, satin glaze, and Dura-Glaze. Triangle Tile brochure shows unlimited possibilities of this medium for light duty floors, walls, wainscots or entryways in any room. Excellent for bold design effects or abstract murals. Triangle Tile has all durable features of Hermosa glazed ceramic tile and has spacers for accurate setting. Write for complete brochure to Gladding, McBean & Co., 2901 Los Feliz Boulevard, Los Angeles 39, California.



A NEW CASE STUDY HOUSE PROJECT. FOR THE MAGAZINE ARTS & ARCHITECTURE: A TRIAD

BY KILLINGSWORTH, BRADY AND SMITH, ARCHITECTS.

WITH THE AMANTEA COMPANY, DEVELOPERS

SIX COMFORT-CONDITIONED FEATURES OF THE CASE STUDY HOUSES:

1. FIBERGLAS BUILT-UP ROOFING

Experience has shown that the fibers of glass allow more asphalt to be applied without danger of deep alligatoring, wicking or blistering. This product is char and rot resistant. Fiberglas roofing is easily applied because of lighter weight plus giving more squares per roll with no curling under heat or moisture. Owens-Corning will bond roofs for up to 20 years if properly applied.

2. FIBERGLAS ACOUSTICAL CEILINGS

Fiberglas noise control products are basically porous products of fibrous glass. They possess all the following advantages important to good sound control installations. Acoustical efficiency, fire safety, dimensional stability moisture resistance, lightweight, heat insulating efficiency. Will not absorb or give off odors.

3. FIBERGLAS BUILDING INSULATION

The outstanding quality of this new insulation is its resilience, or bounce. It is compression packaged for economical warehousing, shipping or job-site handling. There is substantially no "shot," slugs of coarse fibers in the mass. The fibers bond together so well that no enclosing paper is required.

4. FIBERGLAS INSECT SCREENS

Representing a new concept in screening material, hundreds of pure fibers of glass that retain all the

outstanding properties of glass, to which a protective coating of vinyl is added to form a coated yarn. This yarn is woven into a flexible, remarkably strong screen cloth available in various colors.

5. FIBERGLAS DUST STOP AIR FILTERS

Low-cost, disposable Fiberglas dust-stop filters provide a more comfortable house with cleaner air and lower fuel bills.

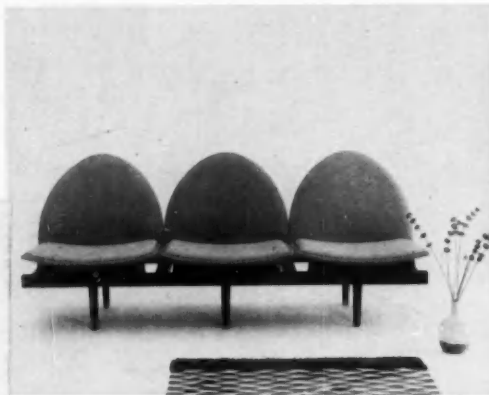
6. FIBERGLAS CURTAIN AND DRAPERY FABRICS

Only Fiberglas offers you a permanent no-iron guarantee plus all these extras: perfect washability, no dry-cleaning bills, no sag, no shrink, no sun-rot and fire safety. Draperies woven of Fiberglas can guarantee you all this . . . because these are inherent qualities of the glass fiber yarns, not just a finish. At fine stores everywhere . . . or ask your decorator.





UNIT A



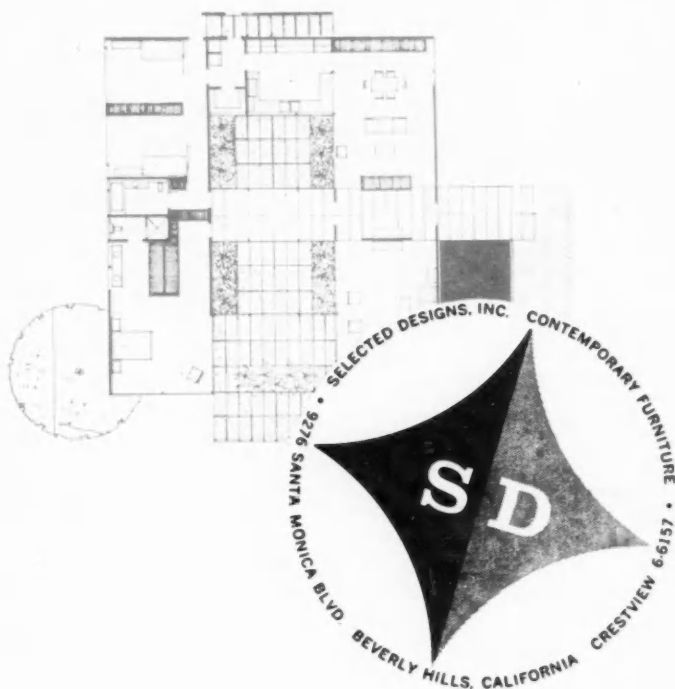
UNIT B



UNIT C

UNIVERSITY MICROFILMS
ATTN EUGENE B POWER
313 N 1ST ST
ANN ARBOR, MICH

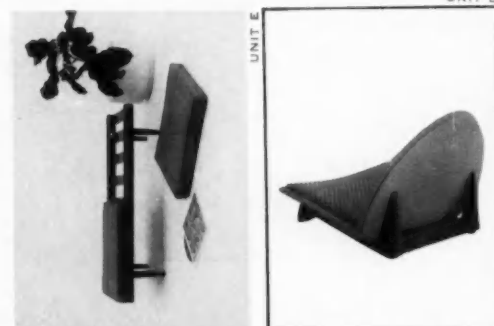
EP



PLAN UNIT SEATING



UNIT D



UNIT E

New concept in versatile seating units *** two and three place
slat benches *** interchangeable chairs, white Formica
fillers and cushion units *** hand crafted upholstery details
in combinations of fine fabrics
and vinyl plastics *** soft walnut finish.



DESIGNED BY WILLIAM P. TAYLOR

CATALOG \$1.00



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